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EVALUATION OF TITLE I PROJECTS (ESEA) IN SCHOOL DISTRICT OF PHILADELPHIA, ACADEMIC YEAR 1965-1966.

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INCLUDED IN THIS REPORT ARE SEPARATE EVALUATIONS OF 19 PROJECTS AND FIVE SUBPROJECTS, A DESCRIPTION OF A PROGRAM TO MASS-TEST A CROSS SECTION OF PUPILS FROM TITLE I SCHOOLS, AND THE RESULTS OF AN ACROSS-PROJECT TITLE I SURVEY. SIX OF THE PROJECTS (READING PROGRAM, MODERN MATHEMATICS, SCHOOL-COMMUNITY COORDINATORS, ELEMENTARY ART, COUNSELOR AIDES) WERE SIGNIFICANTLY BENEFICIAL TO PARTICIPATING PUPILS. EIGHT PROJECTS SUCCESSFULLY ATTAINED SOME OF THEIR SPECIFIED OBJECTIVES, AND ONE DEMONSTRATED LITTLE OR NO BENEFITS. PROGRESS IN EIGHT PROJECTS WAS INSUFFICIENT FOR INVESTIGATORS TO DRAW VALID CONCLUSIONS. ONE PROJECT WAS CANCELLED AND, THEREFORE, NOT EVALUATED. DATA FROM THE GENERAL TITLE I SURVEY INDICATE THAT THE JUNIOR AND SENIOR HIGH SCHOOL MATHEMATICS TEACHERS AND THE STAFF OF THE K-4-4-4 PROJECT HAD RATHER NEGATIVE ATTITUDES TOWARD THE TITLE I ACTIVITIES IN GENERAL. HOWEVER, MORE FAVORABLE ATTITUDES WERE REPORTED BY THE SCHOOL-COMMUNITY COORDINATORS AND BY THOSE INVOLVED IN THE ART PROJECT. (LB)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Technical Report 1-178

EVALUATION OF TITLE I PROJECTS (ESEA) IN SCHOOL DISTRICT OF PHILADELPHIA, ACADEMIC YEAR 1965-1966

by

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November 30, 1966

prepared for the
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by

THE FRANKLIN INSTITUTE RESEARCH LABORATORIES
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FOREWORD

The investigations described in this report were conducted under contract with the School District of Philadelphia. They were originally monitored by Dr. James Becker, the former Associate Superintendent for Research and Development, and later by his successor, Dr. John Hayman. The primary objective of the study was to provide an evaluation of 19 projects separately funded under Title I of the Elementary and Secondary Education Act of 1964.

The program was performed at The Franklin Institute Research Laboratories' Systems Science Division, Mr. Joel N. Bloom, Technical Director. Dr. Carl A. Silver, Manager, Behavioral Science Laboratory, directed the project, and Dr. Clifton E. Mayfield served as project engineer.

The authors wish to express their particular thanks to the many project directors who so willingly gave their time and shared their knowledge and experience with the FIRL staff.

In addition to Drs. Becker and Hayman, the authors wish to thank Dr. Minerva Desing of the Research Division of the School District of Philadelphia for her guidance on this project and her understanding of its vicissitudes. The help of Mesers. David Horowitz and Thomas Risica is also gratefully acknowledged.

The authors also wish to express their appreciation to Mr. Bernard E. Epstein and Mrs. Sandra Maleson for editing the report; Mrs. Diana Zedelis, and Misses Myra Bach and Patricia Adcock for typing the report.

Without the willing and generous cooperation of all of the above this study could not have been completed.

SUMMARY

This report is submitted to the School District of Philadelphia pursuant to a contract between the District and The Franklin Institute Research Laboratories (FIRL). Under this contract, FIRL undertook the following tasks:

1. Evaluate the effectiveness of 19 projects funded under Title I of the Elementary and Secondary Education Act of 1965 during the 1965-66 school year.
2. Score and analyze the results of a mass-testing program conducted in May, 1966.
3. Recommend techniques for implementing a student numbering system.
4. Recommend techniques for implementing a data-bank system for the District.

The FIRL began work on tasks 1 and 2 in early April 1966, although the contract was not received until August. Tasks 3 and 4 were subcontracted to the Federal Systems Division of the International Business Machines Corporation; their reports, with comments by FIRL, have been submitted under separate cover.

Each Title I project is reported in a separate section, and all results pertaining to a project appear in that section. Two additional sections describe the mass-testing program, and the results of an instrument administered in 17 projects (Title I Survey). A separately bound appendix contains samples of measurement instruments used in evaluating the 19 projects.

The evaluations presented are based on individual stated project objectives. Cost/benefit studies or other types of interproject comparisons have not been made except for the Title I Survey, which compares the attitudes of various project staffs toward salient aspects of the Title I effort.

One of the 19 projects consisted of five subprojects. Of the total of 24 projects and subprojects, one project was cancelled and thus not evaluated; six projects (or subprojects) demonstrated clear benefits; eight succeeded in some objectives; one showed little or no benefits; and progress for eight projects was insufficient to draw substantive conclusions.

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*Separately bound.

SECTION 1

INTRODUCTION

1-1. SCOPE OF REPORT

This report is submitted to the School District of Philadelphia pursuant to a contract between the District and The Franklin Institute Research Laboratories (FIRL). Under this contract, FIRL undertook the following tasks:

1. Evaluate the effectiveness of 19 projects funded under Title I of the Elementary and Secondary Education Act of 1965 during the 1965-66 school year.
2. Score and analyze the results of a mass-testing program conducted in May, 1966.
3. Recommend techniques for implementing a student numbering system.
4. Recommend techniques for implementing a data-bank system for the District.

At the urgent request of the School District of Philadelphia, FIRL began work on tasks 1 and 2 in early April 1966, although the contract was not received until August. Also at the direction of School District personnel, tasks 3 and 4 were subcontracted to the Federal Systems Division of the International Business Machines Corporation; their reports, with comments by FIRL, have been submitted under separate cover and are not discussed further in this report.

The 19 Title I projects evaluated, together with the corresponding FIRL, Philadelphia, state, and federal identification numbers, are listed in Table 1-1. Each project is reported in a separate section (sections 2 through 22). All results pertaining to a project appear in that section. Two additional sections are included in this report: Section 22 describes the mass-testing program, and Section 23 presents the results of an instrument administered in 17 projects (Title I Survey). A separately bound appendix (Appendix A) contains samples of measurement instruments used in evaluating the 19 projects.

The mass-testing program consisted of scoring and analyzing the results of aptitude and achievement tests administered to more than 80,000 4th- , 6th- , 8th- , and 12th-grade students in all the poverty-area schools in Philadelphia. This program was designed to provide base-line data for the disadvantaged groups based on nationally standardized tests. Another group of tests, measuring interests, could only be scored by the publisher within the necessary time frame, and thus were not part of FIRL's tasks.

Table 1-1. Project Identification Numbers

Abbreviated Project Title	B. of E/FIRL Project No.	Section of Report	Pa. Temp. Processing No.	Federal No.	B. of E. Budget No.
Speech Improvement	1	2	225	48-605-51-500-18	026
Reading Clinic Lab.	2	3	210	48-148-51-500-01	023
Staff Improvement	3*	4	224	48-159-51-500-12	027
Vocational Skills	4	5	216	48-153-51-500-06	035
Kindergarten Aides	5	6	215	48-152-51-500-05	036
Remedial Reading	6	7	211	48-149-51-500-02 (cancelled)	022
School-Community Coordinators	7	8	214	48-151-51-500-04	021
Massive Basic Skills	8	9	221	48-156-51-500-09	030
Experimental Demonstration Center for Young Children	9	10	226	48-171-51-500-14	025
Elementary Art	10	11	222	48-157-51-500-10	029
Music Instruction	11	12	223	48-158-51-500-10	028
Teacher Aides	12	13	227	48-172-51-500-15	024
French and Spanish	13	14	219	48-170-51-500-13	032
Instructional Materials Centers	14	15	212	48-600-51-500-17	020
Academically Talented	15	16	213	48-150-51-500-03	037
Counselor Aides	16	17	217	48-154-51-500-07	034
Educational Technology	17	18	218	48-544-51-500-16	033
Closed-Circuit TV	18	19	220	48-155-51-500-08	031
Summer Schools	19	20	764	48-816-51-500-23	045
Summer Enrichment Program for Academically Talented Boys	20	21	763	48-756-51-500-22	049
Mass Testing	21	22	-	-	-
Across-Project Evaluation (Title I Survey)	22	23	-	-	-

*Consisted of five subprojects, designated 3a through 3e.

1-2. EVALUATION CRITERIA

The most essential measurement in the evaluation of these projects is the degree to which the stated and approved goals of each project were met. In attempting these assessments, however, the importance of more subtle, slower acting effects must not be overlooked; for example,

> Have gains in one project area been made at the expense of some other academic area?
>
> When a child participates in more than one program, what are the effects on the child and on the individual projects?
>
> How can existing programs be improved?
>
> How much of the success of a program is due to the method used, and how much is due to the enthusiasm of the participants for new approaches (Hawthorne effect)?
>
> If the Hawthorne effect is significant, how may such enthusiasm be maintained after the novelty of a program diminishes?
>
> What are the relative merits of the projects in terms of overall educational and social objectives, and how may such relative merits be evaluated?

These, and other questions, are important in assessing any educational program; in this, the first year of the Title I effort, most are unanswered for the Philadelphia School District. The evaluations presented in this report are limited to the individual projects because FIRL was not engaged early enough, and because the information and information-handling systems for making broader interpretations do not exist. However, the latter are now being developed and, in a year or two, should enable broader interpretations. These developments, which began at the same time as the Title I projects, and the first two of which are being implemented under this contract are

> The introduction of nationally standardized tests on a large scale;
>
> The development of a student numbering system for the unique identification of a student and of all records and transactions associated with him;
>
> Establishment of a computer-based student data file designed for accelerated information retrieval and adapted to a wide variety of operations and reporting formats;
>
> Establishment of a reporting system suitably integrated with the data file;
>
> Expansion of the data file to include other management information; and
>
> Simultaneous development of an executive management system to speed the work of the staff and reduce costs.

1-3. EVALUATION RESTRICTIONS

Several factors seriously impaired the evaluation:

1. Inadequate time was available to plan many projects.
2. Many projects were understaffed, and some were staffed at the expense of other Board of Education programs.
3. Objectives frequently had to be translated into operational (and therefore measurable) terms.
4. The short time many projects were in operation is inadequate for drawing positive conclusions concerning their relative merit.
5. The time available for evaluation for many projects was inadequate for designing and executing complete evaluation procedures.
6. Lack of control groups obviated comparison of Title I program participants' progress with that of non-participants.

The following paragraphs describe these factors in more detail.

The time available to the various project personnel for planning was well below that in which they could reasonably have been expected to do a good job. For this reason, the original stated objectives or the original plans for implementation of several projects have been altered. Such changes were made either to strengthen the program or to contend with unforeseen difficulties in implementation; these factors are described in the separate sections.

The evaluation also has been impaired by the major difficulty of obtaining professional personnel in many areas of specialization called for in the projects. The Board of Education was not able to staff many projects fully, and the staff obtained frequently was recruited at the expense of other Board of Education programs. For example, a primary teacher with special training in art might enroll in the art program, but would then be removed from the list of available primary teachers. Such personnel changes may be considered as personnel "raiding" by persons in those programs which are adversely affected; accordingly, they might adversely affect the programs directly and, by reducing morale, indirectly.

Another important constraint on the evaluation was the frequent statement of project objectives in cultural and social terms. To meet evaluation goals, these objectives had to be translated into operational terms; thus, FIRL had to ask itself and the project directors what measurable information would be considered satisfactory evidence that the social and cultural goals had been advanced. Frequently, this translation was difficult; for some projects, it was impossible.

It would be unreasonable to expect positive results toward meeting every objective in a short period, certainly not in the few weeks available for this year's evaluation. In some instances where high-level skills are to be developed (as, for example, in sight reading music), effects of the training may not be seen for several years.

The time available for evaluation, and the manner in which the ESEA is written, have made completely adequate designs impossible. Thus, individuals accustomed to neat experimental designs may take exception to these reports on several counts, especially the absence of control groups. More time, and a relaxation of the legal restrictions on the program, will facilitate more complete and adequate evaluation.

An important feature of Title I studies is that they are not designed as research projects and, in fact, the evaluation objectives of the program may not take precedence over the intended educational objectives. No child may be excluded from a program to include him in a control group. As a consequence, control groups cannot be established except as they occur incidentally; for example, when enough teachers cannot be found for a program, thereby leaving some eligible groups out, the eliminated groups may be used for control if they are representative of the population.

1-4. SUMMARY OF FINDINGS

1-5. Interpretation of Data

The evaluations presented in the following sections and under the next heading are based on individual stated project objectives. Cost/benefit studies or other types of interproject comparisons have not been made except for the Title I Survey, which compares the attitudes of various project staffs toward salient aspects of the Title I effort (see Section 23).

The unique characteristics of the target population of students often required that new instruments be developed to evaluate performance, attitudes, or both. Although these instruments have not yet been adequately standardized, their use is no less questionable than use of standardized tests which have not been standardized on this population. No two instruments are comparable unless they have been specifically designed for comparability as in certain test series. Comparisons based on different measuring instruments should not properly be used (although at times there may be no alternative), since the standardization groups are rarely comparable.

In interpreting results, it is also important to differentiate between statistically significant differences between groups and differences having practical significance. Any real difference, no matter how small, can be given statistical significance if based on enough cases. But statistical significance implies confidence that the difference did not occur by chance; it does not indicate the *practical* significance of the difference.

In the following analyses, it must be kept in mind that the range of opinion within a group is much greater than the differences in means between groups. Furthermore, most of the differences in group means are so small that they have little practical significance. No arbitrary rule exists by which we can determine how large a difference has practical significance; each case must be interpreted in light of the total *range* of group means as well as the statistical significance of mean differences.

Standard statistical techniques have been used wherever possible to determine the relative significance of the data collected from the Title I test instruments; an annotated bibliography of documents which describe these techniques is included at the end of this report.

1-6. Results

Under this heading, the 19 projects evaluated have been classified according to their measured worth as follows:

1. Projects which demonstrated clear benefits;
2. Projects which have succeeded in some objectives;
3. Projects which showed little or no benefits; and
4. Projects on which insufficient progress has been made for substantive conclusions.

Although, in some cases, project results are both positive and negative, the classification is based on the overall results. However, before drawing final conclusions, the reader should refer to the project report.

All of the findings are conditional upon two points:

1. Few programs were in operation long enough to permit conclusive evaluations; and
2. Few programs actually dealt with pupils — whose progress is the ultimate measure of success.

Nevertheless, the rating assigned a program is a conservative estimate of its worth; that is, programs listed under classification 1 are clearly beneficial — some in ways not envisioned by the originators. These programs should be continued and, if possible, funded at a higher level. The other projects will require more consideration and time if significant results are to be reported. For some projects, this may be simply initiating the program; for other projects, a major re-orientation may be necessary. Detailed recommendations follow each project report.

1. *Projects which demonstrated clear benefits:*

Project 2, Reading Program

Project 3a, Modern Mathematics

Project 5, Kindergarten Aides
Project 7, School-Community Coordinators
Project 10, Elementary Art
Project 16, Counselor Aides

2. *Projects which have succeeded in some objectives:*

Project 3b, Child Study
Project 3d, Teachers' Educational Improvement Program (EIP)
Project 4, Salable Vocational Skills
Project 11, Music Program
Project 14, Instructional Materials Center
Project 15, Academically Able Students
Project 19, Summer Schools
Project 20, Academically Talented Boys in a Campus Environment

3. *Projects which showed little or no benefits:*

Project 3c, New Teachers*

4. *Projects on which progress was insufficient to draw substantive conclusions:*

Project 1, Speech Improvement
Project 3e, K-4-4-4 Orientation
Project 8, Massive Basic Skills
Project 9, Experimental Demonstration Center for Young Teachers
Project 12, Teacher Aides
Project 13, French and Spanish
Project 17, Educational Technology
Project 18, Closed-Circuit Television

---

*This conclusion is based on results of the Title I Survey (Section 23).

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SECTION 2

PROJECT 1, SPEECH IMPROVEMENT

2-1. PROJECT DESCRIPTION

2-2. Objectives

The stated objectives of this program are as follows:

1. To develop the ability to use speech clearly and effectively,
2. To develop understanding of the practical value and pleasure of good speech,
3. To lead students to recognize that personality is reflected in one's voice and use of language,
4. To develop a desire to use good speech,
5. To lead administrators and teachers to accept realistic goals in terms of speech popularly used, and
6. To provide a form of expressive behavior through which aesthetic experience can be realized for those pupils who have no specific artistic talent.

2-3. Summary of Project

The project was organized into four parts.

2-4. Part I

Part I consisted of eight 5-minute speech programs broadcasted over a local commercial television channel during the latter part of the school year. These broadcasts were directed toward the primary-school child and were mandatory for children in three of the poverty schools.

2-5. Part II

Part II of the project consisted of an in-service training program in choral speaking given at selected schools in the poverty areas. Fifty teachers participated. The course consisted of directed pronunciation drill to be developed through group oral exercises in poetry. Teaching plans were developed for children in grades 4 through 6. Practice in application of the teaching principles was obtained in actual classroom work.

2-6. Part III

Part III was a small workshop for teachers with training in speech, conducted during August.

2-7. Part IV

Part IV was a program in linguistics research for 30 teachers from junior and senior high schools, also conducted in August.

2-8. EVALUATION METHOD

Because this project started late, the effect of the program on the children could not be measured directly.

To evaluate part I, a questionnaire (see Appendix A) was administered to teachers of classes who observed the television programs. This questionnaire was intended to assess the adequacy of the programs in meeting the needs of the pupils.

For part II, a questionnaire (see Appendix A) was administered to teachers for the choral-speaking course to assess its adequacy and its impact on the students.

Because time was inadequate, parts III and IV of this project were not evaluated.

2-9. RESULTS

2-10. Televised Speech Program

Results from the classroom teachers responding to the part-I questionnaire are as follows:

1. Of 73 respondents to the questionnaire, 68 thought that television could contribute to their skills in improving the childrens' speech, and 4 thought that it could not.
2. Correct and accurate sound production was the speech aspect thought to be most frequently in need of improvement (61 respondents); increasing the amount of verbal communication was next (48 respondents), followed by increased volume and/or projection (37), and improved melody, or alleviation of monotone (31). Other aspects were named by two respondents.
3. Sixty-five respondents felt that such television programs might promote greater interest in good speech, and 35 felt that these programs could stimulate greater interest in song and poetry.

4. If specific materials for follow-up activities relative to the program content were provided, 61 respondents felt that spending a short time each day in further speech practice would be of value; only 6 respondents felt that such practice would be of no value.
5. Sixty-nine respondents felt that this kind of program would be helpful in providing techniques for incidental improvement of speech throughout the day; 2 responded that it would not be helpful.
6. Of the 42 speech therapists who responded to the television questions, 10 respondents stated that they had not seen the programs. Of the 32 who did view one or more presentations, the majority reported a favorable response by both children and teachers.

Several specific objections to the program were noted:

Poor scheduling time (conflict with recess),

Inadequate time for pupil responses,

Insufficient follow-up material,

Level of presentation too elementary for older children,

Inappropriate inclusion of blends,

Television sets not universally available, and

Some lack of principal and teacher interest.

2-11. Choral-Speaking Program

Of 50 teachers who took the choral-speaking training course, 40 completed the questionnaire, from which the following results were obtained:

1. All 40 respondents believed that students generally enjoyed and benefited from the program.
2. Respondents felt that pupils enjoyed experiencing rhythmical activity and performing verbally more than being exposed to poetry and participating in a group activity. Respondents judged that pupils least enjoyed the opportunity to practice speech patterns in a group.
3. Most respondents (25) felt that improvement in the areas covered by the questionnaire carried over to oral situations, while 9 respondents felt that no carryover occurred; and 23 respondents felt that improvement in these areas carried over to structured speech situations, while 10 felt that it did not. Three respondents felt that it was too early to assess the benefits of the program in these areas.

4. Twenty-nine respondents believed that the gains for the children were commensurate with the time expended in class; only one respondent disagreed. Time allotments suggested for choral speaking ranged from 15 to 150 minutes per week. The largest number of respondents (11) suggested 60 and 75 minutes per week. Spontaneous comments were all favorable, noting increased motivation to use improved articulation and "expression". One respondent enthusiastically endorsed this increased emphasis on "the manipulation of language", an aspect of the language-arts program she believes has received inadequate attention previously.

2-12. DISCUSSION

Planning for this project was unduly rushed to meet Title I deadlines. In addition, a director for the project was not obtained until late in the year; this led to lack of adequate communications. Now that a permanent director has been assigned, this problem may be alleviated and evaluation made easier.

2-13. RECOMMENDATIONS

The enthusiastic comments of the persons involved in this project— even granting the bias of such measures— suggests that the project is meeting a perceived need in the speech area. Such a need, coupled with an evaluation directed more toward measurement of change in the pupils over a longer time, should greatly improve the project results.

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SECTION 3
PROJECT 2, READING PROGRAM

3-1. PROJECT DESCRIPTION

3-2. Objectives

The objectives of the Reading Program ("Reading Clinic Laboratory-Demonstration School") were

1. To establish a laboratory-demonstration school;
2. To perform clinical diagnosis and reading instruction in this school;
3. Through establishment of the school, to provide opportunities for in-service education by observation, etc.;
4. To provide a laboratory situation to test and try out new techniques, etc.; and
5. To provide a resource center for teachers.

3-3. Summary of Project

No laboratory-demonstration school *per se* was established. However, the functions of such a school were partially fulfilled by two summer-school reading programs, begun in July at Benjamin Franklin High School. These programs, which consisted of a reading clinic and a corrective-reading course, lasted for 4-1/2 weeks and were attended by 109 children. Of 22 sessions, two were used for conferences and four to six for testing; 14 to 16 one-hour instruction sessions were held. Teachers for these programs were selected on the basis of expertness and experience; they averaged 5 to 8 years of experience.

The Reading-Clinic Program, directed by Miss Jackson, was attended by 38 children with chronic reading problems. These children averaged 5.16 years behind their grade level at the beginning of the program (using the Individual Informal Reading Inventory). The mean WISC verbal I.Q. score for the 38 children was 94.5; two children's verbal I.Q. scores were below 79. Of these children, 26 were tutored individually and 12 were taught in groups of two. Each child had one 1-hour session per day, and each teacher taught two 1-hour sessions per day. Attendance at this program was 96 percent,

The Corrective-Reading Program, directed by Mrs. Natica Moose, involved 71 children who had reading problems which, while serious, were usually not as severe as those of the children in the Reading-Clinic

Program. Children in the Corrective-Reading Program averaged 3.92 years behind their grade level at the start of the program (using the Group Informal Reading Inventory). Each pupil and each teacher had one 2-1/2-hour session per day. Attendance at this program was 70 percent.

Objective 2 also was partly met by the summer programs. However, because the project started late, an adequate number of children was difficult to register. Nevertheless, nearly everyone who was suggested was accepted, providing some evidence of possible improvement was shown. This evidence consisted of either an I.Q. score or a report from the child's home school.

Objective 3 chould not be fulfilled in the summer session.

Objective 4 was met only in that relatively new reading texts were used.

A resource center for teachers (objective 5) was not provided as part of the summer-school programs; thus, that objective could not be fulfilled.

3-5. EVALUATION METHOD

Two aspects of the summer programs were measured: reading ability; and attitude toward reading, school, and related factors. Three supplementary measures, two of reading ability and one a rating of pupils by the teachers, were given in the Reading-Clinic Program.

Other evaluations originally proposed could not be conducted for a variety of reasons. The ratio of pupils in this program who returned to class could not be compared to that of pupils in other programs because the fall school term had not begun at the time of evaluation. Because the summer-school programs were conducted independently of any other classes, a control group was not available with which the program group could be compared. Finally, because no demonstration classes or in-service activities were provided by the summer programs, no survey regarding these activities was possible.

3-6. Reading-Ability Tests

The Gates Reading Survey, a standardized wide-range reading test, was administered to pupils in the Corrective-Reading Program at the beginning and end of the program; the Group Informal Reading Inventory also was given to this group.

Because it was thought that reading levels of pupils in the Reading-Clinic Program were too low, the Gates Survey was not given to this group. However, the Individual Informal Reading Inventory was given to the pupils in this program.

3-7. Reading-Attitude Survey

Because the disadvantaged child may misunderstand written questions, it would have been desirable to interview them to determine their attitude toward reading, school, and related factors. However, more children were enrolled in the summer programs than could be interviewed during the time available. Therefore, a semantic-differentation survey was administered; a sample portion of this survey is shown in Figure 3-1. This technique was suggested by Schwartz and Tangri,* for pupils whose verbal I.Q.s are 70 or more.

The survey contained 48 differentations of eight concepts; it was administered slowly, with the whole group making one differentation at a time. Six scales were used: good to bad; useful to useless; friendly to not friendly; nice to awful; kind to cruel; and smart to stupid. These scales are reported in *Measurements of Meaning*† to be heavily loaded on the evaluation dimension. The eight concepts scaled were television‡, school, books, self ("I"), teachers, pupils, reading, and summer school. Both the scales and the concepts were rated in the same order in pre- and post-program tests.

3-8. Supplementary Reading-Clinic Tests

Of the three supplementary measures applied to participants in the Reading-Clinic Program, the first two were recommended by the Central Committee of Reading Adjustment Teachers, chaired by Mrs. Rosemary Wilson, the overall head of the summer programs; Miss Jackson and Mrs. Moose served on the committee.

The first measure was a check to determine whether each child knew the alphabet, given at the beginning and end of the program.

The second additional measure was a phonics inventory, consisting of the following 10 test areas of pupils' oral ability:

1. Single consonants, initial position;
2. Single consonants, final position;
3. Consonant digraphs, initial position;
4. Consonant blends, initial position;
5. Rhyming words;
6. Consonant digraphs, final position;
7. Triple-consonant blends, initial position;

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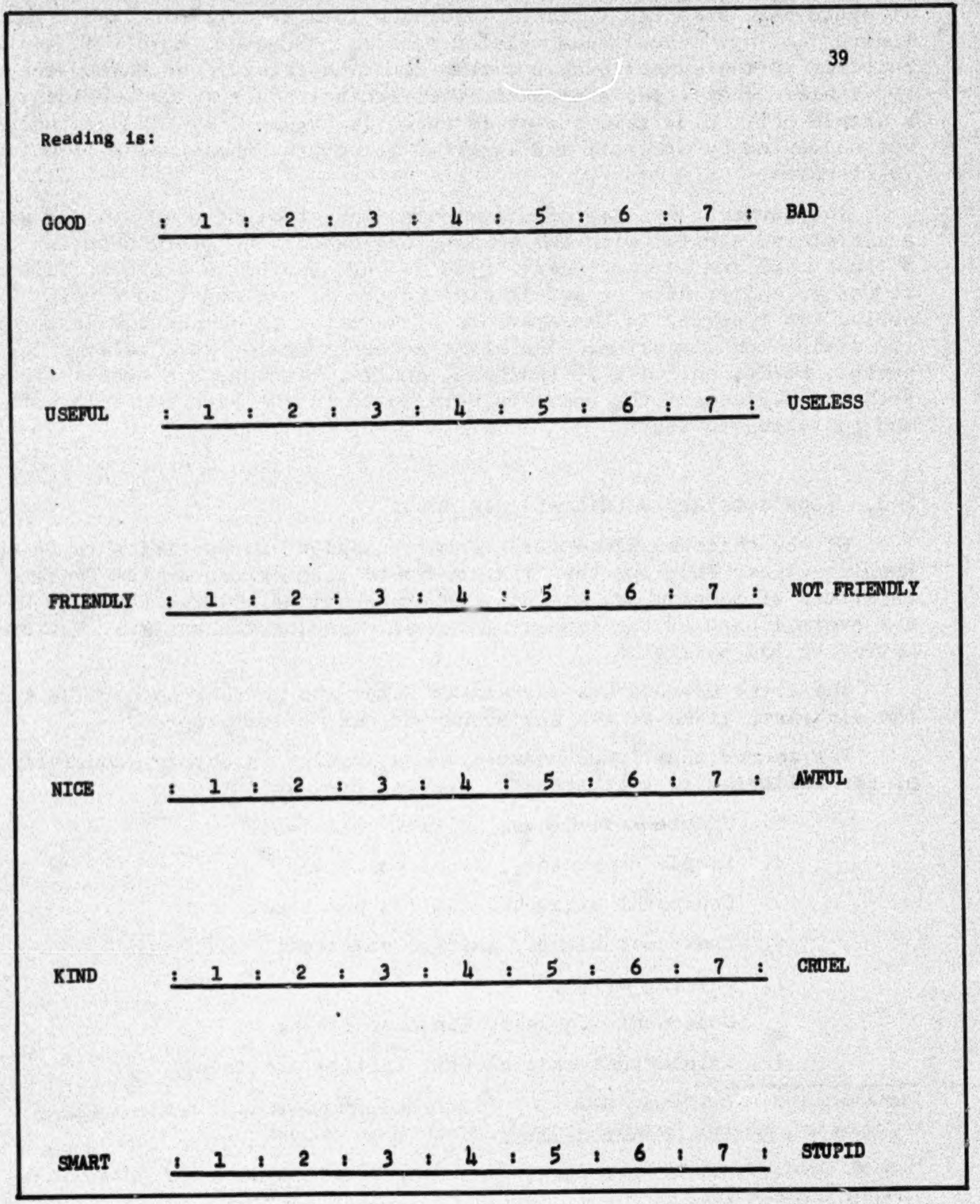
*Schwartz, Michael and Tangri, Sandra S., "A Note on Self-Concept as an Insulator Against Delinquency", American Sociological Review, 30(1965), pp. 922-926.

†Osgood, Charles E., Suci, George J., and Tannenbaum, Percy H., University of Illinois Press, Urbana, Illinois, 1957.

‡Not directly related to the program or to school; used as a warmup device.



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Reading is:

GOOD : 1 : 2 : 3 : 4 : 5 : 6 : 7 : BAD

USEFUL : 1 : 2 : 3 : 4 : 5 : 6 : 7 : USELESS

FRIENDLY : 1 : 2 : 3 : 4 : 5 : 6 : 7 : NOT FRIENDLY

NICE : 1 : 2 : 3 : 4 : 5 : 6 : 7 : AWFUL

KIND : 1 : 2 : 3 : 4 : 5 : 6 : 7 : CRUEL

SMART : 1 : 2 : 3 : 4 : 5 : 6 : 7 : STUPID

Figure 3-1. Sample Rating Sheet, Reading-Attitude Survey

8. Vowels (short), medial position;
9. Vowels (long), initial or medial position; and
10. Nonsense syllables (containing short vowels).

The third supplementary test consisted of a rating by each teacher of his students' progress; the students were rated as excellent, good, fair, or poor.

3-9. RESULTS

3-10. Reading-Ability Tests

A Wilcoxon matched-pairs, signed-ranks test (one-tailed) was applied to the results of the Gates Reading Survey (given to children in the Corrective-Reading Program); the results of this test are shown in Table 3-1.

Table 3-1. Results of Gates Reading Survey Given to 47 Children in Summer Corrective-Reading Program

Reading Characteristic	Maximum Possible Score	Mean Score*		Significance Level	
		Pre-Test	Post-Test	Z	p
Speed and Accuracy	36	8.1	11.7	4.48	< 0.001
Vocabulary	60	22.3	24.2	2.73	< 0.01
Comprehension	43	17.3	16.6	NS*	
Overall	-	-	-	3.34	< 0.001

*Decrement tendency not statistically significant.

Of the 38 children in the Reading Clinic given the Individual Informal Reading Inventory, 24 improved, 1 was worse, and 13 were about the same. The children averaged 5 years below their grade level at the start of the program and 4-1/2 years below at its finish.

Of the 47 children in the Corrective-Reading Program given the Group Informal Reading Inventory, 18 improved, 1 was worse, and 28 were about the same. These children averaged 4 years below their grade level at the beginning of the program and 3-1/2 years below at the end of the program.

Observation by the Temple Reading Clinic (anecdotal) indicates that children who are normal or good readers improve their reading skills over the summer vacation, whereas poor readers usually lose some skill. Because the children in these two programs are poor readers (they started 1 to 9 years below grade level), improvement by the 42—and even the maintenance of status of the 41—shows achievement.

3-11. Reading-Attitude Survey

The results of the reading-attitude survey for the Corrective-Reading Program (Table 3-2) show that school and books are rated significantly better after the program. Tendencies to rate television, self, pupils, reading, and summer school better after the program are statistically nonsignificant, and a tendency to rate teachers worse after the program also is nonsignificant.

The reading-attitude survey results for the Reading Clinic (Table 3-3) showed a statistically nonsignificant tendency for television, books, teachers, and pupils to be rated worse after the program; and a tendency for school, summer school, self, and reading to be rated better after the program, also statistically nonsignificant.

Lack of statistically significant changes in both programs may be partly caused by a "ceiling effect", that is, the tendency of children to rate everything at the good end of the scales, making significant improvement measures difficult to obtain.

3-12. Supplementary Reading-Clinic Tests

The first supplementary test given to children in the Reading-Clinic Program indicated that 23 of the 38 children did not know the alphabet completely at the beginning of the program; by the end of the program, 18 of these improved, 16 knew the alphabet completely, and none had regressed.

In the second supplementary test, 36 children were deficient in at least one of the 10 test areas at the beginning of the Reading-Clinic Program. By the end of the program, 26 of these had improved and none had regressed.

In the third test, teachers rated the progress of 13 children excellent, 13 good, 12 fair, and none poor.

3-13. CONCLUSIONS

3-14. Strengths of Project

In general, the programs were good. Although relatively few sessions were held with the children, much was accomplished. Teachers in both summer-school programs were well trained and carefully selected. And, although the teachers were supervised, they were free to work with their students using a variety of approved techniques. Thus, they could select the best technique for a given child according to his need.

3-15. Weaknesses of Project

The Corrective-Reading Program was organized hastily and at a time when schools were closed or about to close; therefore little information could be gathered about the students.

Table 3-2. Results of Reading-Attitude Survey Given to 47 Children in Summer Corrective-Reading Program

Results based on Wilcoxon matched-pairs, signed-ranks test (one-tailed).

Concept	Mean Cumulative Score*		Significance Level	
	Pre-Test	Post-Test	Z	P
Television	14.6	14.1	NS	NS
School	12.8	13.6	2.51	< 0.01
Books	10.6	11.8	2.09	< 0.02
Self	14.7	14.5	NS	NS
Teachers	10.8	11.5	NS	NS
Pupils	17.2	17.0	NS	NS
Reading	11.1	10.8	NS	NS
Summer School	11.9	10.7	NS	NS

*Lower mean score indicates more favorable attitude.

Table 3-3. Results of Reading-Attitude Survey Given to 38 Children in Summer Reading-Clinic Program

Results based on Wilcoxon matched-pairs, signed-ranks test (one tailed).

Concept	Mean Cumulative Score*		Significance Level	
	Pre-Test	Post-Test	Z	P
Television	16.3	17.6	NS	NS
School	16.1	15.4	NS	NS
Books	15.0	15.3	NS	NS
Self	13.5	13.4	NS	NS
Teachers	16.7	16.9	NS	NS
Pupils	17.0	17.4	NS	NS
Reading	13.5	12.8	NS	NS
Summer School	16.5	15.1	NS	NS

*Lower mean score indicates more favorable attitude.

Lack of communication by the program staff with schools and homes may have contributed significantly to the lower attendance record of children in the Corrective-Reading Program (70 percent as compared with 96 percent for the Reading-Clinic Program). Lack of communication may also have contributed to the lack of significant change in reading attitudes by children in the Corrective-Reading Program.

3-16. RECOMMENDATIONS

Based on the preceding evaluation results, the following recommendations are made:

1. Continue the program.
2. Include more children in the program this fall.
3. Increase the frequency of sessions so that children can meet more often than once a week.
4. Begin a demonstration school this fall, using the same teachers who participated in the summer programs, if possible.
5. Continue using the measures developed for the summer programs, but use control groups to validate test results. Such groups also might be used, for example, to test the informal observation from Temple that children who are poor readers lose skill over the summer when they are not instructed.

SECTION 4
STAFF IMPROVEMENT

4-1. INTRODUCTION

This section contains evaluations of the five subprojects conducted under the Staff Improvement project:

1. Child and Youth Study Program
2. Modern Mathematics Institute
   (Elementary, Junior High, and High Schools)
3. Curriculum Institute for Fifth and Sixth Grade Educational Improvement Program Teachers
4. Orientation to a K-4-4-4 system
5. Orientation of New Teachers

Because each subproject was administered independently, and because the subproject content differed, the evaluations for each subproject are presented separately in this section. However, conclusions and recommendations common to more than one subproject are presented before the individual evaluations.

4-2. PROJECT CONCLUSIONS

Of the five subprograms evaluated, only the Modern Mathematics Institute showed unqualified benefits to the teachers and perhaps to the pupils. Results for the Child Study and the Educational Improvement Program subprograms were somewhat ambiguous. The new-teacher subprogram failed to show significant changes in attitude over the period of study. Finally, the structure of the K-4-4-4 orientation subprogram precluded gathering data relevant to measuring the degree to which the subprogram goals had been met.

4-3. PROJECT RECOMMENDATIONS

In addition to the recommendations made at the end of each subprogram evaluation, the following general recommendations are made:

1. Fund unrelated subprojects, such as those included in this project, separately rather than as part of one project. Even had an overall director been appointed, the diversity of program content would have vitiated any function he might have had. On the other hand, where coordination could have occurred, it did not. For example, the Modern

Mathematics Institute could have been conducted as part of the mathematics section of the Curriculum Institute, at least to the extent of selecting the same texts and testing materials.

2. Select (or develop) and administer measures of achievement of those pupils to be taught by teachers completing this program. Compare their measures with those of control groups to determine project effectiveness.

4-4. CHILD AND YOUTH STUDY PROGRAM

4-5. Subproject Description

4-6. *Objectives*

The stated objectives of this program were as follows:

1. To train teachers to supervise and administrators to understand the nature of the defects of the disadvantaged child;
2. To train teachers
    a. To know the data they must have about each child or to diagnose individual needs,
    b. To become skilled in gathering and interpreting the data, and
    c. To become skilled in planning experiences for children that will be appropriate next steps in needed learning.

4-7. *Summary of Subproject*

The subproject consisted of a series of "guided experiences" conducted in groups of between 8 and 15 individuals under the general supervision of Dr. and Mrs. Daniel A. Prescot. Additional consultants were available as needed. Two groups, to date, have been involved in this phase. One group met from March until June 1966 for 3 hours per week. The second group met in a workshop from July 1 to July 29, 1966. A total of 626 public- and parochial-school personnel participated, of which 571 were from the Philadelphia public-school system and 55 from the parochial-school system. The participants included teachers, counselors, nurses, and various other administrative personnel as listed in Table 4-1.

It had been planned to involve pupils in the program during the coming year. Because this was not done in the early phases, data collected for evaluating this subproject was restricted to the professional participants.

Table 4-1. Participants in Child and Youth Study Subproject

Public-School Personnel	
Teachers	246
Counselors	97
Nurses	1
Consultants	24
Supervisors	17
Psychologists	3
Attendance Officers	7
Administrative Assistants	45
Vice Principals	28
Principals	103
Subtotal	571
Parochial-School Personnel	
Teachers	34
Assistant Principals	3
Principals	18
Subtotal	55
Total	626

4-8. Evaluation Method

To measure the degree to which the objectives had been met, two instruments were selected:

> *The Case of Mickey Murphy (CMM).* This instrument was administered pre- and post-test to both the spring and summer groups; the instrument was selected and administered by Board of Education personnel.
>
> The *Title I Survey* was administered only to the summer group. It was not possible to administer this instrument in a post-test situation.

4-9. Results

Three measures were extracted from the CMM:

1. Avoidance of unwarranted conclusions;
2. Interpretation of data; and
3. Formulation of plans.

The ability of both spring and summer groups to avoid unwarranted conclusions *increased* significantly from pre- to post-test; the ability of the spring group to interpret plans *decreased* significantly; and the ability of the summer group to formulate plans increased significantly. Other pre-post-test changes were statistically nonsignificant. Detailed significance levels of the CMM tests are presented in Table 4-2.

Table 4-2. Pre- and Post-Test Significance Levels of Spring and Summer Training Group Scores on "Case of Mickey Murphy" Test

Variable	Ability to Avoid Unwarranted Conclusions		Ability to Interpret Data		Ability to Formulate Plans	
	Spring	Summer	Spring	Summer	Spring	Summer
Number of participants	285	234	285	234	285	234
Mean difference*	6.63	6.67	-0.83	0.25	0.04	1.14
Standard error of difference	0.68	0.76	0.22	0.26	0.35	0.40
Degrees of freedom	284	233	284	233	284	233
t-value	9.809	8.952	-3.792	0.990	0.111	2.832
Probability level	<0.01	< 0.01	<0.01	NS	NS	< 0.01

*Post-test mean minus pre-test mean.

Results of the Title I survey suggest that the participants in this program have a more sympathetic attitude toward the disadvantaged child and programs designed to help him than do the participants in other programs (see Section 23). However, it cannot be said that this is a function of the program since these are *pre-test* measures only.

4-10. Discussion

Insofar as reliable standardization data on *The Case of Mickey Murphy* is lacking, the statistically significant changes that occurred are of questionable practical significance. At worst, these changes may represent random error; this is most likely when we consider the partial failure to obtain similar changes in both groups, even though the program was essentially the same. On the other hand, the increase in ability to avoid unwarranted conclusions is consistent; this increase may reflect an increase in insight and projection behavior on the part of the participants. Presumably, further work in a formal setting might corroborate this trend.

The findings of the *Title I Survey* suggest that persons entering this kind of program are initially more favorably disposed toward the children than are persons entering other programs. This attitude probably arises from the nature of the particular project to which these persons were attracted.

4-11. Conclusions

The objectives of the subproject were only marginally satisfied. Failure to find consistent improvement over the three groups of participants may mean that the project is organized around the wrong themes. The appropriateness of *Mickey Murphy* to this population and program also should be considered: *Mickey Murphy* is *not* a prototype of the disadvantaged child; perhaps a revised version of this instrument should be considered prior to its use in this or similar projects.

4-12. Recommendations

It is our recommendation that a more representative test instrument be developed if this or similar projects are attempted in subsequent years. If our conclusion relative to the increase in "projection" is correct, then a more intensive program may be necessary.

4-13. MODERN MATHEMATICS INSTITUTE

4-14. Subproject Description

New ideas in mathematics education, techniques, and concepts have been developed by many professional groups in the country. These ideas are now part of a modern curriculum program and are being incorporated in "new" mathematics guides now being prepared for the School District of Philadelphia.

4-15. Objectives

The staff development project in mathematics was designed to fulfill two objectives:

1. To provide in-service training for teachers at the elementary, junior-high, and senior-high levels in new mathematics concepts; and
2. To improve through increased competence the individual teacher's attitudes toward mathematics in general and "modern" mathematics in particular.

4-16. Summary of Subproject

The in-service institute consisted of 40 hours of classwork covered at the rate of 5 hours per day on successive Saturdays. The first class met on Saturday, April 23rd and the last class on June 11, 1966.

Three groups of teachers participated in the program: 688 elementary-school teachers, 231 junior-high-school teachers, and 141 senior-high-school teachers. The number of public- and parochial-school teachers in each group, and the number of teachers taking both pre- and post-test measurement, are listed in Table 4-3.

Table 4-3. Grade Level of Participants and Numbers of Teachers Participating in the Mathematics Knowledge Test

Grade Level	School		Total	Reporting Both Pre- and Post-Test Scores
	Public	Private		
Elementary	550	138	688	502
Junior high	174	57	231	189
Senior high	107	34	141	110

The concepts and texts used for each of these groups differed; however, some integration resulted from having an overall planning committee operate under the curriculum office of the school district. In general, the concepts of the School Mathematics Study Group (SMSG) formed the basis for all three courses.

4-17. Evaluation Method

On the recommendation of the curriculum coordinator of the School District of Philadelphia, FIRL obtained copies of both forms of the Glennon Mathematics Knowledge Tests from Dr. Vincent Glennon at the University of Syracuse. Ten of the 45 items from each of the two forms were eliminated for use in the elementary-school group; four other items from each form were eliminated by FIRL staff members because they were felt to be ambiguous. Thus, the elementary teachers were given 31 items on each form, while the junior- and senior-high teachers were given 40 items on each form.

The FIRL-developed mathematics-attitude scale was also administered at the same time as the mathematics knowledge test. Samples of both instruments are included in Appendix A (separately bound).

The pre-tests were given on the 23rd of April and the post-tests on the 11th of June.

4-18. Results

4-19. Mathematics Knowledge

Table 4-4 presents the pre- and post-mean differences of all three groups on the mathematics knowledge test. In all cases, scores improved significantly between pre- and post-tests. The shift was less marked for the senior-high group, probably caused by an already existing ceiling effect. The probability levels of less than 0.05 for all groups support the hypothesis that a significant change occurred as a result of the coursework.

Table 4-4. Pre- and Post-Test Significance Levels of Teachers in Modern Mathematical Knowledge Test

Grade Level	No. of Teachers	No. of Items on Test	Mean			Standard Error of Difference	t-Value	Degrees of Freedom	p
			Pre-Test	Post-Test	Difference				
Elementary	502	31	17.86	20.53	2.67	0.189	14.142	501	<0.01
Junior high	189	40	29.39	31.57	2.18	0.352	6.176	188	<0.01
Senior high	110	40	33.87	34.48	0.61	0.342	1.781	109	<0.05

4-20. Mathematics Attitudes

Results of the Mathematics Attitude Survey for for all three groups are summarized in Table 4-5.

4-21. Elementary Teachers

Elementary teachers' attitudes on items 1, 2, 7, 8, 10, 11 and 12 changed significantly. Thus, after the course, elementary teachers found mathematics more interesting (item 1), more usable (item 2), being given less thought outside of school hours (item 7), rated higher by students (item 8), rated more usable by students (item 10), more effectively taught by themselves (item 11), and more effective as taught by the new method (item 12).

4-22. Junior-High Teachers

Junior-high teachers showed significant changes on items 2, 4, 8, and 14; these changes indicate that, after the course, they thought mathematics were more usable (item 2), more fun (item 4), more liked by the students (item 8), and should be taught using less drill (item 14).

4-23. Senior-High Teachers

Senior-high teachers showed no significant changes in attitude toward mathematics after the training session.

4-24. Discussion

The mathematics knowledge scores are inversely related to the mathematics attitude scores; that is, the group with the lowest knowledge score (elementary teachers) exhibited the greatest change in mathematics attitudes, while the group with the highest knowledge score (senior-high teachers) exhibited the least change in attitude. This observation may be interpreted as an indication that the "new math" was quite familiar

Table 4-5. Mathematics Attitude Survey Data Showing t-Test Results for Each Item by Grade Level of Teachers

Item	Pre-Test			Post-Test			t-Value	Degrees of Freedom	Probability Level
	n	Standard Deviation	Mean	n	Standard Deviation	Mean			
Elementary									
1	641	0.73	1.48	597	0.63	1.39	2.326	1236	< 0.05
2	641	0.82	1.66	601	0.65	1.40	6.226	1240	< 0.01
3	637	0.88	1.75	600	0.80	1.69	1.258	1235	NS
4	641	1.20	2.26	601	1.12	2.27	-0.152	1240	NS
5	640	0.92	2.55	597	0.83	2.52	0.602	1155	NS
7	640	0.91	2.84	601	0.82	2.74	2.036	1239	< 0.05
8	638	0.87	2.29	598	0.78	2.18	2.339	1234	< 0.05
9	638	0.90	2.18	595	0.82	2.09	1.839	1231	NS
10	635	0.90	2.19	598	0.82	2.06	2.656	1231	< 0.01
11	639	0.76	2.40	600	0.72	2.30	2.374	1237	< 0.05
14	639	0.92	2.12	597	0.91	2.10	0.383	1234	NS
12	638	1.13	2.93	599	1.28	2.74	2.759	1235	< 0.01
Junior High									
1	227	0.60	1.29	211	0.55	1.28	0.182	436	NS
2	226	0.84	1.72	212	0.71	1.56	2.157	436	< 0.05
3	227	0.71	1.42	212	0.69	1.38	0.598	436	NS
4	227	1.22	2.17	211	1.04	1.85	2.961	436	< 0.01
5	225	0.87	2.26	209	0.85	2.22	0.484	432	NS
7	227	0.85	2.58	211	0.84	2.46	1.484	436	NS
8	226	0.86	2.54	212	0.84	2.38	1.966	436	< 0.05
9	226	0.91	2.42	209	0.87	2.33	1.053	433	NS
10	227	0.90	2.17	212	0.81	2.05	1.468	437	NS
11	226	0.77	2.27	209	0.72	2.21	0,840	433	NS
14	227	0.94	2.22	212	0.94	2.51	-3,237	437	< 0.01
12	227	0.97	3.00	212	1.15	2.87	1.277	437	NS
Senior High									
1	162	0.48	1.22	124	0.45	1.19	0.545	284	NS
2	162	0.80	1.73	124	0.62	1.62	1.313	284	NS
3	162	0.60	1.31	124	0.51	1.27	0.609	284	NS
4	162	1.01	1.94	124	0.90	1.82	1.059	284	NS
5	161	0.83	2.15	124	0.67	2.05	1.124	283	NS
7	163	0.83	2.52	124	0.67	2.40	1.353	285	NS
8	162	0.83	2.51	124	0.74	2.47	0.429	284	NS
9	161	0.92	2.44	124	0.83	2.47	-0.289	283	NS
10	161	0.82	2.26	124	0.81	2.26	0.000	283	NS
11	162	0.75	2.14	124	0.62	2.03	1.362	284	NS
14	162	0.91	2.64	124	0.79	2.60	0.398	284	NS
12	161	0.97	2.78	124	1.00	2.82	-0.339	283	NS

2

to the senior-high teachers and they have long-standing attitudes which were not readily changed by the training session. On the other hand, the elementary teachers were not as familiar with the new math and the training session increased their skills and confidence in its implementation as shown by their increased knowledge score and the positive shift in attitude toward the new math. Response by elementary teachers to item 7 on the post-test may be interpreted as a reduction in anxiety over mathematical problems; after the training period, their knowledge of mathematical problems had increased (as proved by the significant increase in the mathematical knowledge score) and these problems were no longer a source of great concern.

4-25. Conclusions

4-26. *Mathematics Knowledge*

Even when the mathematics knowledge scores of the elementary teachers are adjusted for the difference in the number of items they were given, their mean scores are below those of the junior-high and senior-high teachers. From this, we may conclude that the junior- and senior-high teachers had more knowledge of mathematics, as measured by the Glennon test, than did the elementary teachers.

From the t-values, it is apparent that the elementary teachers showed the greatest increase (about three items) in score; however, they began with the least knowledge. The junior- and senior-high teachers apparently began with established knowledge of the new math and increased their scores by only one item.

4-27. *Mathematics Attitudes*

The groups showing the greatest increase in knowledge also showed the greatest positive change in attitude toward mathematics. Evidently, when knowledge of a subject is significantly increased, there is an accompanying positive shift in attitude toward the subject.

4-28. Recommendations

This year's evaluation focused on the teachers' abilities and attitudes regarding the new math; yet, the ultimate focus of the project is on the achievement of students of these teachers. Therefore, coming evaluations must include measurements of students' progress in this area. It is recommended that data be collected for testing the effectiveness of the teachers trained in the new math as compared to that of teachers without such training. The research design would include pre- and post-measures of students of trained teachers and matched control groups of students.

4-29. ELEMENTARY EDUCATIONAL IMPROVEMENT PROGRAM

4-30. Subproject Description

4-31. *Objectives*

The objectives of the program for improving education at the elementary-school level (EIP) were

1. To provide teachers of language arts, mathematics, science, and social studies with updated course content at a "Curriculum Institute", and
2. To provide these teachers with opportunities to learn better class planning methods.

4-32. *Summary of Subproject*

From August 1 to 31, 1966, 558 upper-grade elementary teachers of language arts, mathematics, science, and social studies attended instructor sessions in their subject area, at a Philadelphia junior high school; these sessions lasted 5 hours each day. During this time, all teachers attended seminars on team teaching and observed team planning by teachers in the Laboratory School, and observed children in these Laboratory School classes.

Instruction sessions and observation classes at the EIP were taught by experts in each subject area or technique. In addition, consultants in intergroup relations, team teaching, mathematics, and the psychology of teaching the economically deprived were scheduled weekly.

The facilities at the school used for the program included an instructional materials center, an experienced audio-visual staff, and an interaction laboratory. In the latter, individual teachers could work with the same child during the project in planned learning situations which encourage problem-solving and interpersonal communication.

4-33. Evaluation Method

All participating teachers were pre- and post-administered the Title I Survey.

In addition, pre- and post-tests were given in the EIP subject-matter areas of language arts (STEP Reading), social studies (STEP Social Studies), science (AAAS Science Test), and mathematics (SMSG Mathematics). The experimental design called for testing the null hypothesis of no difference between the respective pre- and post-test means.

Pre- and post-tests for the STEP Reading and STEP Social Studies tests each consisted of two parts totaling 80 minutes. All participants received both parts in pre-testing, but to reduce testing time in post-testing they were randomly assigned either part I or part II.

3D

4-34. Results

Results of the Title I Survey for this group are reported in Section 23.

Results of t-test analyses on pre- and post-tests for the AAAS, SMSG, STEP Reading, and STEP Social Studies tests are summarized in Table 4-6. Significant differences resulted for the SMSG and STEP Reading tests. Variances of the reading pre- and post-tests were significantly different ($F = 4.146$, $p < 0.01$); therefore, a t-test for differences of means of groups with heterogeneous variances was used. Differences between pre- and post-test means on the AAAS and STEP Social Studies tests were not significant.

To equate the two-part pre-test scores with the one-part post-test scores on the STEP Reading and Social Studies tests, the pre-test scores were divided by two; these data also are presented in Table 4-6.

Table 4-6. Means and t-Test Ratios for EIP Pre- and Post-Tests

Test	Number of Participants		Mean		Standard Deviation		t-Ratio	Probability
	Pre	Post	Pre	Post	Pre	Post		
AAAS	99	97	54.4	54.9	12.84	11.06	0.251	NS
SMSG	122	55	12.8	15.9	7.27	8.20	2.509	< 0.05
STEP Reading	450	429	22.9	27.0	5.77	1170	6.529*	< 0.01
STEP Social Studies	88	92	17.4	18.0	5.95	6.75	0.630	NS

*For groups with unequal variances.

4-35. Conclusions

Two subject-matter tests showed significant gains in learning and two failed to show significant gains. However, the second objective of the EIP program was to improve the individual teacher's skills in teaching a particular subject. Thus, teachers in groups which did not show significant learning gains may have improved both their knowledge of teaching methods and their teaching skills and ability; however, until such knowledge and skills are measured under classroom conditions, this conclusion cannot be corroborated.

Detailed descriptions of the results of each subject follow.

4-36. Science

The revised forms of the AAAS Science Test showed essentially no change in score from the pre- to post-test forms. Since these revisions had not been tried before, an item analysis of the two forms will be needed to determine whether they are equivalent in form. If Forms A and B are of equivalent difficulty and internal consistency, then there was no true score gain in the post-test mean (Form B).

4-37. *Mathematics*

The School Mathematics Study Group tests (Forms A and B) were used without revision. Because the two forms are equivalent in item difficulties and internal consistency[1], the difference between the pre- and post-test means is a true difference; therefore, the significantly higher post-test scores by teachers studying mathematics in the Curriculum Institute indicates that they learned during the session.

4-38. *Language Arts*

All participating teachers were given pre- and post-tests (Forms A and B) of the College Freshman and Sophomore level STEP Reading. It would be expected that adults would show little or no improvement in a basic skill such as reading over a 4-week period; however, the Curriculum Institute participants scored significantly higher on the post-test.

As shown in Table 4-6, the standard deviation of the post-test is almost twice that of the pre-test, indicating that some participants increased their score significantly more than did others. Thus, the average improvement is not uniform over all participants.

The significance of the difference of scores is also a result of the sample size, and may mean only that the sample accurately represents some population. However, the pre-test group averaged 23 items correct out of a possible 35, and the post-test groups averaged 27 items correct— an average increase of four items correct. Compared with the STEP Reading norms for college freshmen, a score of 23 correct has a range from the 28th to 50th percentile, and a score of 27 correct has a range from the 51st to the 84th percentile. Thus, the two percentile ranges do not overlap, indicating that this score difference is practically as well as statistically significant.[2]

4-39. *Social Studies*

The post-test score of the social studies group was not significantly better than the pre-test score, indicating that they failed to increase their knowledge of social studies as measured by the STEP Social Studies test. The pre-test mean was 17 items correct, the post-test score was 18 items correct; the percentile ranges for college freshmen are 28th to 51st percentile and 40th to 62nd percentile.[3]

4-40. *Comments from a Supervisor*

A supervisor of Science Methods commented to the FIRL researcher that, for 25 years, he had participated in workshops with inadequate facilities, supplies, equipment, instructors, and participants. With the Title I funds, for the first time, he could conduct a training session that actually accomplished its goals. The participants were learning and becoming enthusiastically involved with the subject and methods; they were even pleased with the tests being used for evaluation. This supervisor felt that the participants will return to their schools and be able to make greater contributions than those derived from any previous summer program in which he has participated in the Philadelphia schools.

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[1] As confirmed by a communication from Dr. Edward Begle, School Mathematics Study Group, Stanford University, Palo Alto, California.

[2] Norms from the "1962 SCAT-STEP Supplement" and "STEP Manual for Interpreting Scores - Reading", Educational Testing Service, Princeton, New Jersey.

[3] "1962 SCAT-STEP Supplement" and "STEP Manual for Interpreting Scores - Social Studies", Educational Testing Service, Princeton, New Jersey.

4-41. Recommendations

1. *Curriculum Institute.* Before next year's Institute, the subject-matter content should be made available before instruments are selected, in order that testing instruments may be chosen which more accurately measure the degree to which the objectives of this program have been met.
2. *Classroom Studies.* In addition to a direct test of the teachers involved, an experimental design for measuring the achievement gains of affected and nonaffected children should be used.

4-42. ORIENTATION TO A K-4-4-4 SYSTEM

4-43. Subproject Description

4-44. *Objective*

The objective of this program was to train and orient teachers and administrators in the philosophy of the K-4-4-4 school organization.

4-45. *Summary of Subproject*

The training program began in May on Saturdays and continued throughout August. Research personnel were available to give information and answer questions. Some opportunity for visiting other school districts was also provided. The program consisted of orientation in the areas of guidance and subject team teaching, large- and small-group instructions, and independent-study techniques.

4-46. Evaluation Method

One instrument, the Title I Survey, was administered to the participants in this program. No attempt was made to assess the retention of the substantive portions of the program because copies of the lectures were not available to the evaluators prior to initiation of the program. Should copies be made available in the future, subsequent evaluations of similar programs could take such areas into account.

4-47. Results

Section 23 of this report summarizes the Title I Survey means by item and by project. The data suggest that participants in this project have a more negative attitude toward the concept of Title I, toward the project in particular, and toward the disadvantaged child than do participants in other projects. These results, however, may reflect the characteristics of the participants more than the effect of the project. A more significant evaluation of this project must wait until measurements on the approximately 8000 pupils who will participate during the 1966-67 school year can be obtained.

4-48. Discussion

The evaluation of the project cannot be completed until the K-4-4-4 reorganization has actually been in effect for some time. However, preliminary results indicate that the program was hastily conceived and carried out; for example, team-teaching approaches were emphasized at the expense of training in problems peculiar to the K-4-4-4 approach. This project was conducted in conjunction with, and under the same direction as project 17 (Section 18); because these projects were only marginally related, undesirable interaction may have resulted.

4-49. Recommendations

The following recommendations are made:

1. Orient the project material more specifically to the K-4-4-4 program than was done this year;
2. Retest teacher participants in this program after 1 year, and test children involved in this program at least twice during that time.

4-50. NEW TEACHERS

4-51. Subproject Description

4-52. Objectives

This subproject has the following objectives:

1. To provide an intensive training period for all newly appointed teachers in the poverty areas;
2. To orient new teachers to sociological and psychological factors they will face in the classroom;

3. To orient new teachers to promising classroom management techniques and procedures;
4. To provide new teachers with guided observation of excellent teaching in actual classroom situations; and
5. To provide new teachers with practice in preparing teaching materials.

4-53. *Summary of Subproject*

The subproject participants met in a high school from July 1 to July 29, 1966. The participants were approximately 400 elementary and 150 secondary-school teachers. They were divided into groups under the direction of 28 leaders who were selected on the basis of their experience in helping new teachers and their knowledge of disadvantaged children. The program covered the psychology and sociology of the child from the disadvantaged home, with stress being placed on the characteristics of this type of child and the kind of motivation that might be used to encourage him to stay in school. Other topics discussed included classroom management, record keeping, teaching methods, techniques, and preparation of instructional materials. The teachers also had an opportunity to view children being taught by "master" teachers in poverty schools and to discuss the class with the master teacher afterward.

4-54. Evaluation Method

Two measurement instruments were used for this subproject:

1. *Title I Survey*. This survey was given at the beginning and at the end of the project;
2. *Teacher Attitude Survey*, consisting of 61 paired adjectives. This test was given at the beginning of the project.

These instruments were directed toward assessing teachers' attitudes toward the disadvantaged child, toward their project, and toward themselves as teachers.

Because no children were involved in the project, some objectives could not be evaluated. In particular, it was not possible to evaluate the teachers' ability to handle the disadvantaged child. Nor was it possible to develop and validate an instrument to measure teachers' ability to teach and to develop lesson plans.

4-55. Results

The results of the Title I Survey responses are presented in Section 23.

Table 4-7 presents the factor loadings for each of the 61 adjective pairs of the Teacher Attitude Survey. Six significant factors were extracted and rotated to the varimax[4] approximation to simple structure. The six resulting factors may be taken to represent the cognitive dimensions utilized by these teachers in their judgment of children. The factors have been tentatively identified as follows:

1. *Affectivity*. Indicated by scales pleasant-unpleasant; nice-awful; and kind-cruel.
2. *Normalcy*. Indicated by scales intelligent-stupid; normal-abnormal; and healthy-sick.
3. *Sensory reactivity*. Indicated by scales fresh-stale; hot-cold; and bright-dark.
4. *Emotional tone*. Indicated by scales miserable-happy; morose-enthusiastic; and lazy-energetic.
5. *Social value*. Indicated by scales rich-poor; calm-agitated; and clean-dirty.
6. *Potency or control*. Indicated by scales rugged-delicate; ferocious-peaceful; and hard-soft.

These six dimensions account for approximately 88 percent of the variance in the judgments.

4-56. Discussion

The failure of the group to show significant improvement in attitudes on the Title I survey may be due to any of several causes:

1. The program may not have been long enough to permit a significant shift in attitudes.
2. The method of instruction may have been ineffective.
3. The instrument may be insensitive to such changes; however, the fact that it reflects differences between teachers in different programs tends to negate this interpretation.

The Teacher Attitude Survey presents a picture of the perception of the student by the neophyte teacher. Because the method is multidimensional, it should be sensitive to changes in such perceptions over time.

4-57. Recommendations

The following recommendations are made to improve this project:

1. In future evaluations, use the factors identified in the factor analysis to develop pupil rating scales

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[4] Horst, Paul. Factor Analysis of Data Matrices, New York: Rinehart and Winston, Inc., 1965.

which uniquely measure these factors in individual teachers.

2. Compare teacher attitudes and pupil performance of these teachers with those of a control group.

Table 4-7. Factor Matrix for Teacher Survey

Scales	Factor Loading					
	1	2	3	4	5	6
1. good-bad	0.4406	0.1761	0.0927	-0.0924	0.1563	-0.2232
2. large-small	-0.0259	0.0507	-0.0021	0.0769	0.3188	0.2269
3. beautiful-ugly	0.3278	0.1937	0.4502	-0.0607	0.0368	0.0132
4. yellow-blue	0.0606	0.0848	0.1817	0.0976	0.2932	0.1104
5. hard-soft	-0.0840	-0.1266	-0.0435	0.0576	0.0249	0.4734
6. sweet-sour	0.4210	0.0799	0.4001	-0.1920	0.0915	0.0128
7. strong-weak	0.1547	0.2781	0.1507	-0.1278	0.1112	0.3035
8. clean-dirty	0.3969	0.1433	0.0868	-0.3118	0.4634	-0.1150
9. high-low	0.0513	0.2328	0.2496	-0.1591	0.3138	-0.0856
10. calm-agitated	0.4185	-0.0419	0.0078	-0.1006	0.4869	-0.1836
11. tasty-distasteful	0.2928	0.1580	0.3868	-0.0738	0.0792	0.0257
12. valuable-worthless	0.4141	0.1832	0.2495	-0.2354	-0.0659	0.0428
13. red-green	0.1110	-0.0632	0.3633	-0.0960	0.1756	0.2549
14. young-old	0.3460	0.1173	0.2186	-0.1779	0.0457	0.1428
15. kind-cruel	0.5866	0.2073	0.1193	-0.1687	0.1631	-0.1346
16. loud-soft	-0.0087	0.0947	-0.0202	0.0621	-0.0900	0.4601
17. deep-shallow	0.0613	0.3777	0.3181	-0.1028	0.1011	-0.0302
18. pleasant-unpleasant	0.6039	0.2502	0.2429	-0.1992	0.1096	-0.0020
19. black-white	0.0568	-0.0645	0.0569	0.1017	-0.0161	0.4064
20. bitter-sweet	-0.1967	-0.2102	-0.0031	0.2271	0.1530	0.4629
21. happy-sad	0.3487	0.1521	0.1336	-0.2947	0.2880	0.0450
22. sharp-dull	0.0666	0.4430	0.2761	-0.3124	0.3053	-0.0474
23. empty-full	-0.0105	-0.1608	-0.0949	0.4035	0.1572	0.3281
24. ferocious-peaceful	-0.3187	-0.0693	0.0907	0.1826	-0.0126	0.5021
25. heavy-light	-0.0719	0.1084	0.1974	0.0694	0.3782	0.2229
26. wet-dry	-0.0101	0.1711	0.2587	0.3070	0.3412	0.3085
27. sacred-profane	0.3926	0.0904	0.2720	-0.0423	0.1873	-0.1661
28. relaxed-tense	0.4336	0.0031	-0.0880	-0.1035	0.3543	-0.0629
29. brave-cowardly	0.4033	0.2597	0.1658	-0.2029	0.1399	0.2061
30. long-short	0.0473	0.0758	0.2329	0.2150	0.4470	0.1621
31. rich-poor	-0.0072	0.2145	0.1533	0.1058	0.5922	-0.1750
32. clear-hazy	0.1873	0.2371	0.2904	-0.1345	0.4679	-0.1237
33. hot-cold	0.0471	0.0456	0.5402	0.0537	0.2155	0.2485
34. thick-thin	0.0193	-0.0397	0.3743	0.2904	0.3777	0.2130
35. nice-awful	0.5978	0.1899	0.3211	-0.2123	-0.0154	-0.0143

Table 4-7. Factor Matrix for Teacher Survey (cont)

Scales	Factor Loading					
	1	2	3	4	5	6
36. bright-dark	0.2043	0.2318	0.5146	-0.1710	0.2956	0.0191
37. treble-bass	0.0942	0.0713	0.4913	0.0611	0.2849	0.1260
38. angular-rounded	0.0160	0.0501	0.2837	0.3574	0.1253	0.2091
39. fragrant-foul	0.3297	0.1159	0.5051	-0.0630	0.3692	-0.1345
40. honest-dishonest	0.4800	0.1785	0.1756	-0.2684	0.3373	-0.0607
41. active-passive	0.2017	0.4690	0.2085	-0.2806	0.0817	0.0614
42. rough-smooth	-0.0167	0.0506	0.1795	0.2171	-0.0325	0.5098
43. fresh-stale	0.1382	0.2300	0.5459	-0.0062	0.1155	0.0755
44. fast-slow	0.0375	0.3484	0.3085	-0.1012	0.4280	-0.0126
45. fair-unfair	0.5036	0.3734	0.1390	-0.0738	0.2017	-0.0241
46. rugged-delicate	0.1553	0.3084	0.0309	0.0557	-0.0066	0.5153
47. near-far	0.1892	0.3617	0.3973	0.1050	0.2354	0.0474
48. pungent-bland	-0.0187	0.4452	0.3275	0.3541	0.1155	0.1989
49. healthy-sick	0.2644	0.5039	-0.0179	-0.0085	0.2940	-0.0350
50. wide-narrow	0.0496	0.4412	0.2924	0.4118	0.3060	-0.0224
51. attractive-repugnant	0.4030	0.4807	0.2463	0.0764	0.0851	-0.0621
52. dirty-clean	-0.1618	0.0789	0.0344	0.5930	-0.1248	0.2265
53. intelligent-stupid	0.2256	0.5841	0.0875	0.0228	0.2798	-0.1141
54. miserable-happy	-0.2242	0.1238	0.0332	0.6881	-0.0242	0.0901
55. alert-disinterested	0.2070	0.5854	0.1533	-0.0248	0.2835	-0.2338
56. rebellious-docile	-0.2438	0.4621	0.0852	0.3190	-0.1031	0.2903
57. quiet-noisy	0.1730	0.2049	0.0076	0.4007	0.3565	-0.2259
58. lazy-energetic	-0.0721	-0.0356	-0.1148	0.6192	0.0622	0.2013
59. normal-abnormal	0.2966	0.5252	0.0297	0.0017	0.1877	-0.0665
60. funloving-serious	0.1068	0.4098	0.0801	0.0860	0.0106	0.2046
61. morose-enthusiastic	-0.0576	-0.0733	-0.1050	0.6601	0.0201	0.0986

SECTION 5

PROJECT 4, SALABLE VOCATIONAL SKILLS

5-1. PROJECT DESCRIPTION

5-2. Objectives

The objectives of this project are to

1. Develop vocational compentency for children in economically deprived areas by providing

   Remedial work in vocational subjects,
   Reinforcement of existing skills to make them salable, and
   Opportunities to develop new salable skills;

2. Improve the attitude toward employment; and

3. Develop familiarity with employment opportunities.

5-3. Summary of Project

The first phase of the program ran from March 1 to June 15, for two hours after school, five days a week for senior high and four days for junior high schools. The second phase began on June 27 and ended July 29 for junior high and August 12 for the senior high school students. Hours were the same as those during the regular summer school. About 7,500 enrolled in the after-school program and 1,300 in summer school.

Subject offerings included business data processing, key punch, cosmetology, Pitman shorthand, shorthand laboratory, typewriting (manual and electric), auto mechanics, auto body and fender rapair, commercial art, drafting, electricity and electronics, printing, machine shop, sheet metal, wood working, and power sewing machine.

During the first phase of the program it was necessary to drop certain classes because of a decrease in enrollment. It was also necessary to substitute a more popular class for a less popular one.

Salable Vocational Skills began for the new school year on October 17 and will run until May 17, 1967. Courses offered are essentially the same as those offered last year. However, two changes have been instituted:

Classes now meet after school, two hours per day, three days a week.

Saturday-morning classes are being opened in various schools as the demand develops. Many parochial and private school students find it difficult to attend after-school classes during the week. Saturday-morning classes will give them an opportunity to participate.

5-4. EVALUATION METHOD

A Vocational Training Questionnaire (Form 45a) prepared by FIRL personnel was administered to a random sample of students participating in the summer vocational training program. This instrument was used to probe the students' motivation for taking the course, to ascertain their own estimates of their vocational competency and the contribution of the program to that compentency, and to provide a view of the employment opportunities which these students feel are open to them. The starting date of the program precluded any pre-testing. However, a refined version of the Vocational Training Questionnaire, Student Questionnaire 45b, was administered to all participating students toward the end of the summer, in hopes of obtaining a secondary measure of the students' attitudes toward employment and employment opportunities.

To determine the teachers' attitudes toward the project, the Title I Survey for teachers was administered to the teachers who participated in the Vocational Skills Program.

It was not possible to test actual skill improvement because the project director felt skill tests should not be administered in a voluntary program.

5-5. RESULTS

The Vocational Training Questionnaire, Form 45a, was a six question, open-ended questionnaire to measure motivation and attitudes toward vocational competency and employment opportunities. The results of the measure of student motivation for students taking the course are shown in Figure 5-1.

In the area of vocational competency, 59.4 percent felt the course they were taking would prepare them directly for employment after graduation; 40.6 percent felt it would not. In addition, 89.2 percent felt additional training would help them find a job; only 10.8 percent felt it would not.

The measures of attitudes on employment opportunities indicate 91.8 percent of the students feel there are sufficient jobs available in the selected occupations. Answers to a question on the number of employment contacts indicated that 35.1 percent of the students knew of fewer than three contacts; 64.9 percent knew of three or more contacts. Of the students, 51.3 percent felt it would take them less than one month to find a job; 48.7 percent felt it would take one month or longer.

The questions on the Student Questionnaire, Form 45b, fall into three categories: motivation, subjective evaluation of the program, and relevance of the program to the students' occupational prospects. A

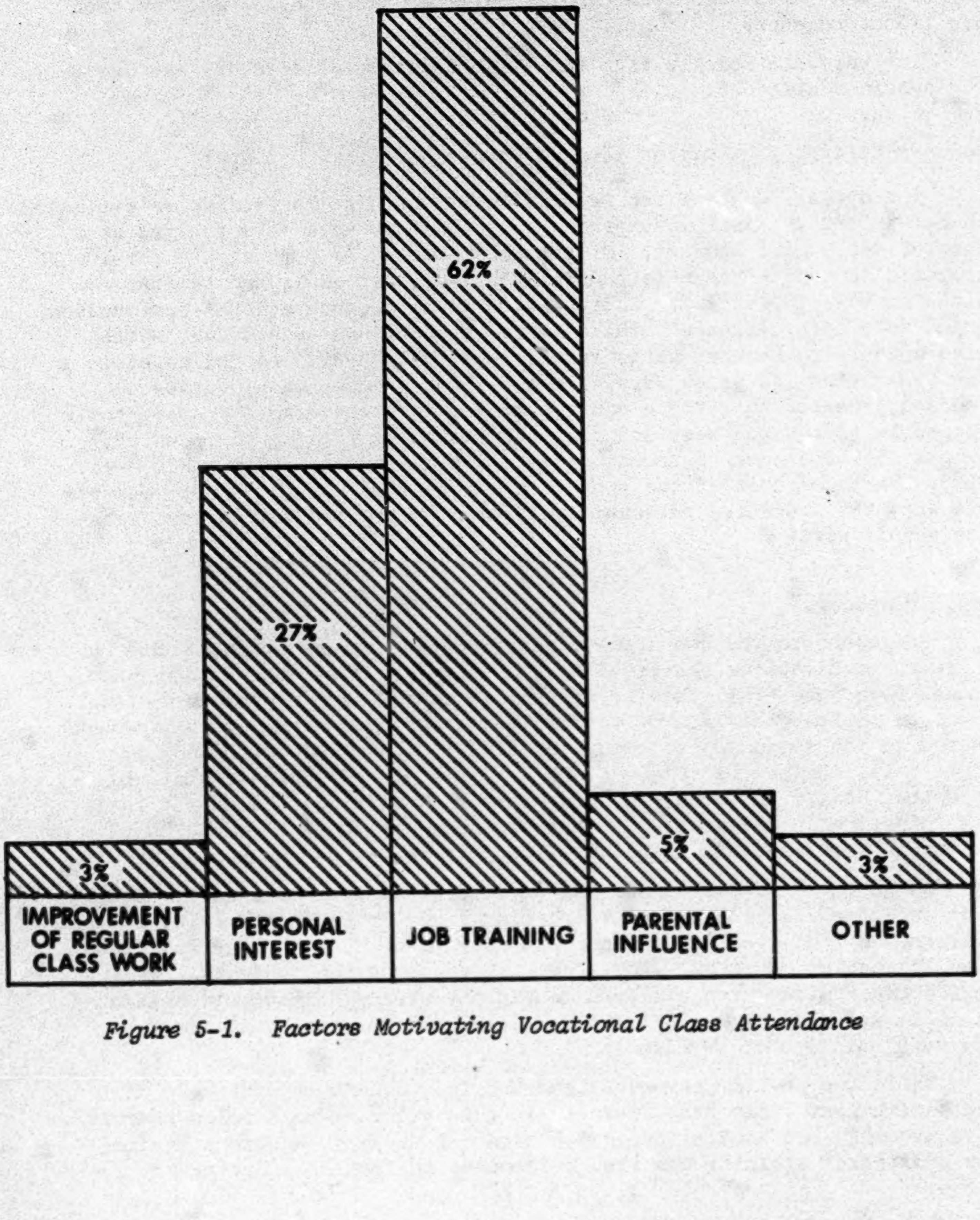

Figure 5-1. Factors Motivating Vocational Class Attendance

summary of the responses received in each of these groups is found in Table 5-1. The five possible answers to each question were assigned values 1 through 5, and the mean response and standard deviation for each question was calculated accordingly. Similar questions in each section are listed together.

The relevant results from the Title I Survey of teachers are described in Section 23.

5-6. COST/EFFECTIVENESS OF SALABLE VOCATIONAL SKILLS PROJECT

The overall cost of the Salable Vocational Skills Project is estimated to be $593,823. For this expenditure, 8,607 students were trained at a cost of $69.00 per student. Of the total costs, 85 percent was for instruction and 15 percent for administrative, custodial, and seminar planning (see Table 5-2). This appears to be a good ratio of instruction expense to total expense. The cost per student hour was $0.49, which also appears to be very satisfactory (see Table 5-3). As indicated in the evaluation (question 20, Table 5-1), the students taking these courses expected that these courses would, on the average, improve their income by $20.00 per week and that they would be willing to spend approximately $4.00 a week to receive this training (question 21, Table 5-1). Since the total cost of the program was approximately $5.00 per week per student, the students' personal evaluation of the program approximates the actual cost.

5-7. DISCUSSION

Responses to the two student questionnaires corresponded strongly. While the motivations expressed by the students on the open-ended questionnaire ranged from a desire to improve schoolwork to an interest in arts and crafts, the lack of parental pressure evidenced here was corroborated by the responses to questions 5, 12, 9, and 18 on Form 45b (see Table 5-1). Responses to questions 2, 3, 7, and 10 indicate that while students' desire to learn new things provides more motivation for their participation in the program than their need for remedial work, they expect this extra study to have a favorable effect on their regular work.

While the students do not sharply differentiate the project courses from their regular classes on the basis of quality (questions 14, 17, and 19), they do feel that in the project they learn "a lot", perhaps "more", than in regular courses. (Note that questions on the students' feelings toward the project were not included in the preliminary questionnaire, since it was felt that at that point there had not been sufficient time for such opinions to develop.)

While the preliminary questionnaire indicated that over half of the participants felt that training in this program would allow them to move smoothly and easily into a job after graduation, a strong desire for additional training was also evidenced and further supported by re-

Table 5-1. Responses to Form 45b

Question	Mean Response	Standard Deviation
Motivation		
3. The chance to learn new things was ___ reason for me wanting to go to the extra classes. 1. a very important 2. an important 3. an unimportant 4. a very unimportant 5. not a	1.649	1.02
7. The chance to learn new things will ___ reason for me wanting to go to the extra classes next year. 1. be a very important 2. be an important 3. be an unimportant 4. be a very unimportant 5. not be a	1.676	1.24
4. Because some of my friends will be going will ___ reason for me wanting to go to the extra classes next year. 1. not be a 2. be a very unimportant 3. be an unimportant 4. be an important 5. not be	2.420	1.65
13. The fact that some of my friends were going to the extra classes was ___ reason for me wanting to go to the extra classes. 1. not a 2. a very unimportant 3. an unimportant 4. an important 5. a very important	1.583	1.04
2. The fact that the regular work in school is too hard was ___ reason for me wanting to go to the extra classes. 1. a very important 2. an important 3. an unimportant 4. a very unimportant 5. not a	3.845	1.59

Table 5-1. Responses to Form 45b (cont)

Question	Mean Response	Standard Deviation
Motivation (cont)		
10. The extra classes will help me do ___ in my regular school work. 1. much better 2. a little better 3. no better 4. a little worse 5. much worse	1.521	0.70
5. The fact that my mother wanted me to attend was ___ reason for me wanting to go to the extra classes. 1. not 2. a very unimportant 3. an unimportant 4. an important 5. a very important	2.020	1.47
12. Because my mother wants me to will ___ reason for me wanting to go to the extra classes next year. 1. not be a 2. be a very unimportant 3. be an unimportant 4. be an important 5. be a very important	1.996	1.34
9. The fact that my father wanted me to attend was ___ reason for me wanting to go to the extra classes. 1. a very important 2. an important 3. an unimportant 4. a very unimportant 5. not a	3.771	1.55
18. Because my father wants me to will ___ reason for me wanting to go to the extra classes next year. 1. be a very important 2. be an important 3. be an unimportant 4. be a very unimportant 5. not be a	3.920	1.41

Table 5-1. Responses to Form 45b (cont)

Question	Mean Response	Standard Deviation
Students' Subjective Evaluation of Program		
1. Compared to my regular school classes I learned ___ in the extra classes. 1. much less 2. a little less 3. the same as 4. a little more 5. much more	4.274	0.95
8. Compared to our regular school classes most of us learned ___ in the extra classes. 1. much less 2. a little less 3. the same as 4. a little more 5. much more	4.189	1.02
11. In these extra classes I learned ___. 1. a lot about many things 2. a lot about a few things 3. a little about many things 4. a little about a few things 5. nothing	1.788	0.99
16. In these extra classes most of us learned ___. 1. nothing 2. a little about a few things 3. a little about many things 4. a lot about a few things 5. a lot about many things	3.860	1.14
14. Compared to my regular school classes, these extra classes were ___ interesting. 1. much more 2. slightly more 3. about as 4. slightly less 5. much less	1.663	1.00
17. Compared to my regular school classes these extra classes were ___. 1. much easier 2. a little easier 3. no different 4. a little harder 5. much harder	2.309	1.22

Table 5-1. Responses to Form 45b (cont)

Question	Mean Response	Standard Deviation
Students' Subjective Evaluation of Program (cont)		
19. The teachers in the extra classes were ___ than my regular school teachers. 1. much worse 2. worse 3. no different 4. better 5. much better	3.673	0.91
Relevancy of the Program to Students' Occupational Prospects		
6. In order to get a job in this occupational area, I ___. 1. need much more training than I now have. 2. need slightly more training than I now have. 3. need no more training. 4. already have slightly more training than I need. 5. already have much more training than I need.	1.426	0.64
15. By taking additional training in this area, I can expect to earn ___. 1. about the same wage 2. a little bit more than I would without the training 3. some more than I would without the training. 4. much more than I would without the training. 5. a great deal more than I would without the training.	3.203	1.34
20. By taking additional training in this occupational area, I could expect to earn ___ a week more than I would without the training. 1. zero dollars 2. 10 dollars 3. 20 dollars 4. 30 dollars 5. 40 dollars	3.145	1.33
21. In order to earn the amount selected in the preceding question, I would be willing to spend up to ___ a week for additional training. 1. zero dollars 2. 2 dollars 3. 4 dollars 4. 6 dollars 5. 8 dollars	2.975	1.53

Table 5-2. Program Costs

Item	Cost (dollars)*	Percent of Total Cost
Instruction	502,742.92	84.7
Administration and supervision	66,360.00	11.2
Custodians	20,700.00	3.4
Planning seminar	4,020.00	0.7
Total	593,822.92	100.0

*Basic data obtained from Philadelphia Board of Education.

Table 5-3. Costs per Student-Hour and -Week

Students Enrolled

After school	7,290
Summer	1,317
Total	8,607

Class Hours

After school - 2 hours per day, 69 days	138
Summer - 4.5 hours per day, 34 days	153

Student Hours

After-school students x hours = 7,290 x 138	1,006,020
Summer students x hours = 1,317 x 153	201,501
Total student hours	1,207,521

Costs per Student-Hour*

Total cost divided by total student hours	$0.49

Student Weeks

After-school students x weeks = 7,290 x 15	109,350
Summer-school students x weeks = 1,317 x 7	9,219
Total	118,569

Cost per Student-Week

Total cost divided by total student weeks	$5.01

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*Basic cost data obtained from Philadelphia Board of Education.

sponses to questions on the second questionnaire. This desire seemed motivated, in part at least, by monetary considerations, as shown by responses to questions 15, 20, and 21.

The employment opportunities, as indicated by the students' responses on the preliminary questionnaire, look bright indeed; however, many mentioned that it is necessary to be capable and efficient in one's trade to obtain the good results they predicted. Some also indicated that a particular industry's stand on the labor market would be a determining factor, regardless of an individual's skill. The students seemed familiar with employment contacts - state agencies, personnel offices of large firms, private businesses, and the like - but only 1.1 percent of those tested inlcuded their school in the list of contacts. Training is being given in existing vocational areas; however, only ordinary curriculum planning has been done to establish the salability of these skills.

5-8. CONCLUSIONS

Every indication is that the project to develop salable vocational skills is successfully meeting its present objectives. Equipment and instructional materials are at the disposal of the qualified teachers leading this project. Participating students are finding this an opportunity to further their skills in certain areas or to learn new ones. While remedial vocational learning was not a primary motivating factor in this year's project, benefits obtained by this year's participants will no doubt encourage those who have the opportunity to participate in next year's program. Evidence of salability of these skills is lacking.

5-9. RECOMMENDATIONS

Insofar as the attitudes of these students are concerned, the project appears to be successful; however, skill measurements should be made to provide better information on the project's effectiveness. The *salable* vocational skills project would most definitely be enhanced if some procedure were established to coordinate more closely the activities of the schools with job placement agencies and trade schools. In addition, school authorities should make information on these agencies more readily available to students.

To improve project evaluation, it would be beneficial to compare vocational competency and occupational awareness in groups of students who do and do not participate in the project. Further advantages would accrue if a "follow-up" program could be implemented six months or a year after graduation to survey students from within and without the program to determine actual employment differences between the groups.

SECTION 6

PROJECT 5, KINDERGARTEN AIDES

6-1. PROJECT DESCRIPTION

This project provided aides to assist the kindergarten teacher in all phases of the kindergarten program to enhance her effectiveness and benefit the individual children.

The aides, although not trained teachers, were friendly, interested, and warm persons; under the teachers' direction, they provided a wide variety of services which helped not only the teachers, but the individual children and the kindergarten program as a whole. Additionally, and perhaps most importantly, the aide was another person to whom the child in the kindergarten could relate and from whom he or she could learn.

6-2. Objective

The stated objective of this project was to help kindergarten children overcome the detrimental effects of their environment by providing them with experiences which would enhance their self-image, develop valued identity, increase communication ability, and develop mental and physical abilities, thus increasing emotional security and heightening social consciousness.

6-3. Summary of Project

Approximately 150 kindergarten aides were hired and trained. In some schools, aides were active in the classroom for 3 to 4 months during the spring of 1966.

During this period, follow-up meetings were conducted by the kindergarten supervisors in which aides received advice and training. The supervisors also held orientation meetings in each district for the school principals and other staff members, including those schools not receiving aides, to familiarize them with the purposes, goals, and operation of the kindergarten-aide program. The supervisors visited and observed kindergarten classrooms and evaluated the program by personal observation.

Some kindergarten aides left their positions during the period of service. Some left to get married, others because of pregnancies or poor health; but a large portion of those leaving had been sufficiently stimulated by their aide experience that they returned to college to become kindergarten teachers themselves.

6-4. EVALUATION METHOD

The primary evaluation was to have been checklist rating scales or profiles of each child with regard to the stated objectives; these instruments were to be completed by the teachers for each child before and after the kindergarten aide was available in the classroom. However, because the program was underway before these instruments could be developed, no pre-test measure was possible.

Another planned evaluation instrument was a questionnaire to determine the degree to which the goals were met by pupils in classes with kindergarten aides and, using the same instrument, to compare these results with those of similar classes without kindergarten aides. Because the program already was underway when the evaluation began, the School District requested FIRL to omit this evaluation and instead collect data on the expectations and experiences of the kindergarten aides with regard to their functions. Therefore, a questionnaire was designed to provide post-test data for evaluating the functions of the kindergarten aides.

The major groups of these categories are listed below; sub-categories within these groups are included with the questionnaire, reproduced in Appendix 6-A:

A. Preparation and care of materials
B. Housekeeping
C. Routines
D. Work periods
E. Outdoor play
F. Music
G. Neighborhood walks and trips
H. Building peer and group relationships
I. Emergencies

The Kindergarten Aide/Teacher Questionnaire was administered to 61 kindergarten aides, 77 kindergarten teachers with aides, and 11 kindergarten teachers without aides. The last group were kindergarten teachers who had requested aides, but who did not have them either because they were in ineligible schools or simply because the number of aides was insufficient. The questionnaire included questions about the importance of the various kindergarten aide functions, as well as an estimate of the proportion of time the aide would be expected to spend performing each function. The questionnaire further inquired about actual experiences within the kindergarten classroom as related to the importance of and the time spent in each function. Fifty items were also included to measure the concept of the child held by the kindergarten teacher and the aides.

The completed questionnaires were returned to FIRL for data reduction and analysis. The analysis consisted of comparisons of expectations of functions, actual experience of functions, and the concept of the child among the three groups of subjects. The specific statistics were chi-square and t-tests.

Additional information was provided by program supervisors who visited kindergarten classrooms and made informal observations on the project and its effectiveness.

6-5. RESULTS

Questionnaire results are summarized under the following heading; details of the frequency of response to specific questions are presented in Appendix 6A.

The supervisors' evaluations are summarized under heading 6-7.

6-6. Questionnaire

Teachers and aides differed significantly (as indicated by the chi-square test) on only one item (26) of the questionnaire. This substantial agreement indicates that the role of the aide is viewed substantially the same by both teachers and aides. Therefore, in the following discussion, responses of teachers have not been differentiated from those of aides.

In the questionnaire, teachers and aides were requested to select from the nine categories of functions (listed under heading 6-4) the three most important and the three least important for the teacher and for the aide. The results for both are shown in Table 6-1. Both teachers and aides felt that preparation of materials was in the professional realm of the teacher, whereas helping with work periods and helping children get along together were considered important for both of them.

Another question was directed toward determining which categories required the most and the least supervision of the aides by the teachers; these results are shown in Table 6-2. Significantly, teachers supervised aides most during the most important aide functions (Table 6-1).

The questionnaire also investigated which functions required the most time by teachers and aides. As shown in Table 6-3, amounts of time spent on functions of teachers and aides complement one another; that is, the aides spent most of their time in housekeeping, routines, and work periods, while the teachers spent the least amount of their time in these activities. Conversely, the teachers spent most time in preparation of materials, work periods, and building relationships among the children, while the aides spent little time in these areas.

Table 6-3 also shows that the 11 teachers who did not have aides spent most of their time performing the same functions as the teachers with aides; however, functions on which teachers with and without aides spent the least time differed significantly. Teachers with aides spent the least amount of time in housekeeping, routines, and emergencies which, as shown previously, were areas mostly performed by aides; teachers without aides spent their least amount of time in outdoor play, walks and trips, and emergencies.

Table 6-1. Three Most and Least Important Aide and Teacher Functions

Importance	Functions*	
	Aides	Teachers
Most	Housekeeping Work periods Building relationships among children	Preparation of materials Work periods Building relationships among children
Least	Preparation of materials Music Emergencies	Housekeeping Routines Emergencies

*No significant difference in functions selected by aides and teachers.

Table 6-2. Three Aide Functions Requiring Most and Least Teacher Supervision

Amount of Supervision	Aide Functions*
Most	Preparation of materials Work periods Building relationships among children
Least	Housekeeping Routines Outdoor play

*No significant difference in functions selected by aides and teachers.

Table 6-3. Functions on Which Aides, and Teachers With and Without Aides, Spent the Most and Least Amounts of Time

Amount of Time	Functions		
	Aides	Teachers	
		With Aides	Without Aides
Most	Housekeeping Routines Work periods	Preparation of materials Work periods Building relationships among children	
Least	Preparation of materials Music Emergencies	Housekeeping Routines Emergencies	Outdoor play Walks and trips Emergencies

The questionnaire also contained 50 questions concerning the concept of the children held by teachers and aides (Appendix 6A). Teachers' responses to 7 of the 50 items differed significantly from those of aides (items 59, 61, 73, 78, 86, 89, and 100); responses to the remaining questions did not differ significantly.

6-7. Supervisors' Evaluation

Although the supervisors' evaluations are purely subjective, they are significant because they were made by individuals with years of experience in the kindergarten programs of the Philadelphia schools.

The supervisors felt that perhaps the most significant contribution of the project was the increase in the amount of time the teacher (and the aide) could spend in relationships with individual children. They felt that communication skills were enhanced because the sizes of groups participating in listening and speaking activities were reduced, thereby allowing more time for individual attention from both teacher and aide. And the supervisors observed that social consciousness was developed in the children as more assistance was available in learning the give and take of peer interaction and peer-group membership.

The supervisors felt that the success of the program was demonstrated by the following:

1. The kindergarten teacher could give immediate attention to problem situations rather than waiting until classroom activities permitted. The teacher had more time to listen to individual pupils and to the tone of the class.
2. Trips within and without the neighborhood were made more frequently because the aides were able to organize them. A greater variety of activities could be conducted during the class day.
3. The kindergarten teacher's morale was boosted because she had been recognized by the administration and was free to concentrate on areas utilizing her professional training in the classroom.
4. The problems of handling a sick child were more efficiently handled because the aide could either take over the class or accompany the ill child to the nurse or his home when necessary.
5. When the teacher was absent, the aide helped maintain continuity of teaching by informing the substitute of current activities and briefing the regular teacher when she returned.
6. The children developed emotionally because two adults were in the kindergarten classroom who could give and receive affection responses.
7. During play periods, the children could be left under supervision while equipment was being obtained.

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3. The kindergarten teacher's morale was boosted because she had been recognized by the administration and was free to concentrate on areas utilizing her professional training in the classroom.
4. The problems of handling a sick child were more efficiently handled because the aide could either take over the class or accompany the ill child to the nurse or his home when necessary.
5. When the teacher was absent, the aide helped maintain continuity of teaching by informing the substitute of current activities and briefing the regular teacher when she returned.
6. The children developed emotionally because two adults were in the kindergarten classroom who could give and receive affection responses.
7. During play periods, the children could be left under supervision while equipment was being obtained.

8. The aides helped the children develop independence of action by assisting them in their play and other classroom activities.
9. Some aides with special talents, such as music ability, gave freely of these talents, thus broadening the cultural exposure of the children.

6-8. CONCLUSIONS

1. Kindergarten aides and teachers closely agreed on the importance and value of the functions they were to perform, indicating that both teachers and aides have been well oriented to the role of the aide in the classroom.
2. An aide in the kindergarten room helps supplement the teacher's time and effort spent on these functions; the teacher can concentrate on her professional-level functions, such as preparing materials and helping the children build interpersonal relationships, while the aide takes over some of the more tedious and mundane functions.
3. While teachers and aides are performing routine duties, and during work periods, they work closely with the pupils; thus, the children benefit from the increased time they spend in face-to-face relationships with two adults who can guide their development.
4. Teachers without aides may sacrifice some of their outdoor-play and field-trip time to perform housekeeping and routine activities. Thus, the aide program accomplished the goal of exposing kindergarten children to the culture in their surrounding area.
5. Teachers and aides have a very similar concept of the kindergarten children in their class. This unanimity of concept is especially important because it enables teachers and aides to work for the same goals in parallel.

6-9. RECOMMENDATIONS

The following recommendations are based on the preceding conclusions:

1. Continue this program with little, if any, modification.
2. Extend the program to more kindergarten classrooms.
3. In the next evaluation, emphasize the child's development and how this development is affected by the aide program; compare the development of children in classes with aides to that of children in classes without aides.

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APPENDIX 6-A

FREQUENCY OF RESPONSE OF ANSWERS TO QUESTIONNAIRE

This appendix contains frequency-of-response tables (Tables 6A-1 and 6A-2) for questions in the Kindergarten Teacher and Kindergarten Aide Questionnaire (instrument 47). For questions 33 through 100 (Table 6A-2), means and variances between teachers and aides also are presented.

The questionnaire itself is reproduced following the tables.

Table 6A-1. Frequency of Response of Aides and Teachers to Questions 1 through 32 of Kindergarten Teacher/Aide Questionnaire

Question Number	Response	Aides		Teachers				Total	
				With Aides		Without Aides			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	1	33	65	51	66	N/A		84	66
	2	11	22	15	19			26	20
	3	1	2	3	4			4	3
	4	4	8	7	9			11	9
	5	2	4	1	1			3	2
TOTAL	-	51	-	77	-			128	-
2	1	5	10	2	3	N/A		7	6
	2	5	10	8	10			13	10
	3	5	10	20	26			25	20
	4	13	27	16	21			29	23
	5	20	42	31	40			51	41
TOTAL	-	48	-	77	-			125	-
3	1	20	43	31	41	N/A		51	41
	2	14	30	20	26			34	28
	3	5	11	12	16			17	14
	4	7	15	12	16			19	15
	5	1	2	1	1			2	2
TOTAL	-	47	-	76	-			123	-
4	1	11	22	11	14	N/A		22	18
	2	15	31	21	27			36	28
	3	9	18	13	17			22	18
	4	6	12	12	16			18	14
	5	8	16	20	26			28	22
TOTAL	-	49	-	77				126	-
IV	1	35	57	3	4	0	0	38	25
	2	23	38	7	9	1	9	31	21
	3	1	2	10	13	1	9	12	8
	4	1	2	10	13	3	27	14	9
	5	0	0	9	12	1	9	10	7
	6	0	0	11	14	1	9	12	8
	7	1	2	17	22	1	9	19	13
	8	0	0	10	13	3	27	13	9
TOTAL	-	61	-	77	-	11	-	149	-

Table 6A-1. Frequency of Response of Aides and Teachers to Questions 1 through 32 of Kindergarten Teacher/Aide Questionnaire (cont)

Question Number	Response	Aides		Teachers				Total	
				With Aides		Without Aides			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
V	1	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0
	3	38	58	0	0	0	0	38	24
	4	22	34	6	8	1	9	29	19
	5	5	8	45	58	9	82	59	39
	6	0	0	26	34	1	9	27	18
TOTAL	-	65	-	77	-	11	-	153	-
VI	1	61	100	0	0	0	0	61	41
	2	0	0	77	100	0	0	77	52
	3	0	0	0	0	11	100	11	7
	4	0	0	0	0	0	0	0	0
TOTAL	-	61	-	77	-	11	-	149	-
5	1	17	37	31	41	N/A		48	39
	2	19	41	32	42			51	42
	3	7	15	10	13			17	14
	4	3	7	2	3			5	4
	5	0	0	1	1			1	1
TOTAL	-	46	-	76	-			122	-
6	1	13	26	20	26	N/A		33	26
	2	3	6	4	5			7	6
	3	0	0	1	1			1	1
	4	3	6	9	12			12	9
	5	31	62	42	55			73	58
TOTAL	-	50	-	76	-			126	-
7	A	25	21	42	22	N/A		67	21
	B	3	2	3	2			6	2
	C	12	10	21	11			33	11
	D	1	1	10	5			11	4
	E	13	11	17	9			30	10
	F	31	26	48	25			79	25
	G	11	9	8	4			19	6
	H	8	7	16	8			24	8
	I	17	14	27	14			44	13
TOTAL	-	121	-	192	-			313	-

Table 6A-1. Frequency of Response of Aides and Teachers to Questions 1 through 32 of Kindergarten Teacher/Aide Questionnaire (cont)

Question Number	Response	Aides		Teachers				Total	
				With Aides		Without Aides			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
8	A	12	9	19	12	N/A		31	10
	B	41	30	36	22			77	26
	C	36	27	36	22			72	24
	D	4	3	2	1			6	2
	E	10	7	14	9			24	8
	F	4	3	12	7			16	5
	G	10	7	14	9			24	8
	H	3	2	2	1			6	2
	I	15	11	29	18			44	15
TOTAL	-	135	-	164	-			299	-
9	A	8	6	10	5	N/A		18	5
	B	27	21	57	28			94	28
	C	12	9	25	12			37	11
	D	29	23	39	19			68	21
	E	7	2	14	7			21	6
	F	4	5	1	0			5	2
	G	11	9	15	7			26	8
	H	17	13	27	13			44	13
	I	3	2	17	8			20	6
TOTAL	-	128	-	205	-			333	-
10	A	19	15	26	13	N/A		45	13
	B	3	2	11	6			14	4
	C	6	5	10	5			16	5
	D	33	25	65	33			98	30
	E	5	4	8	4			13	4
	F	18	14	16	8			34	11
	G	6	5	3	2			9	2
	H	34	26	54	27			88	27
	I	7	5	6	3			13	4
TOTAL	-	131	-	199	-			330	-
17	A	7	5	14	6	1	3	22	6
	B	40	29	65	30	9	30	114	30
	C	16	12	29	13	5	17	50	13
	D	28	20	37	17	5	17	70	19
	E	4	3	14	6	4	13	22	6
	F	7	5	4	2	0	0	11	2
	G	12	9	12	6	3	10	27	7
	H	19	14	25	12	1	3	45	12
	I	5	4	162	7	2	7	23	5
TOTAL	-	138	-	216	-	30	-	384	-

Table 6A-1. Frequency of Response of Aides and Teachers to Questions 1 through 32 of Kindergarten Teacher/Aide Questionnaire (cont)

Question Number	Response	Aides		Teachers				Total	
				With Aides		Without Aides			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
18	A	25	23	42	20	2	6	69	20
	B	5	5	3	1	0	0	8	3
	C	10	9	25	12	3	9	38	11
	D	1	1	9	4	2	6	12	3
	E	15	14	28	13	4	12	47	13
	F	22	20	51	24	10	30	83	23
	G	8	7	11	5	5	15	24	7
	H	4	4	13	6	4	12	21	6
	I	18	17	29	14	3	9	50	14
TOTAL	-	108	-	211	-	33	-	352	-
19	A	23	23	33	17	4	6	60	18
	B	3	3	3	2	0	0	6	2
	C	12	12	24	12	2	6	38	12
	D	2	2	5	3	3	9	10	3
	E	11	11	28	14	5	15	44	13
	F	21	21	49	25	9	27	79	24
	G	5	5	12	6	4	12	21	6
	H	3	3	12	6	4	12	19	6
	I	18	18	30	15	2	6	50	16
TOTAL	-	98	-	196	-	33	-	327	-
20	A	7	5	11	5	1	3	19	5
	B	39	30	62	29	10	30	111	30
	C	10	8	25	12	6	18	41	10
	D	35	27	50	23	5	15	90	24
	E	2	2	12	5	4	12	18	5
	F	4	3	0	0	1	3	5	2
	G	9	7	14	7	2	6	25	6
	H	19	15	27	13	3	9	49	13
	I	5	4	12	6	1	3	18	5
TOTAL	-	130	-	213	-	33	-	376	-
21	A	8	6	14	7	2	6	24	9
	B	41	33	65	31	11	33	117	29
	C	17	13	25	12	6	18	48	13
	D	37	29	58	28	7	21	102	28
	E	2	2	10	5	2	6	14	4
	F	2	2	1	0	0	0	3	1
	G	4	3	6	3	1	3	11	3
	H	14	11	25	12	4	12	43	11
	I	1	11	6	3	0	0	7	2
TOTAL	-	126	-	210	-	33	-	369	-

Table 6A-1. Frequency of Response of Aides and Teachers to Questions 1 through 32 of Kindergarten Teacher/Aide Questionnaire (cont)

Question Number	Response	Aides		Teachers				Total	
				With Aides		Without Aides			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
22	A	27	22	34	16	1	3	62	17
	B	4	3	4	2	0	0	8	2
	C	10	8	21	10	2	6	33	9
	D	2	2	5	2	1	3	8	2
	E	13	11	20	10	5	15	38	11
	F	23	19	49	24	9	27	81	23
	G	15	12	24	12	5	15	44	12
	H	1	1	7	3	0	0	8	2
	I	26	21	43	21	10	30	79	22
TOTAL	-	121	-	207	-	33	-	361	-
23	A	19	23	36	21	7	23	62	22
	B	0	0	6	4	2	6	8	3
	C	3	4	5	3	3	10	11	4
	D	24	29	44	27	11	35	79	29
	E	3	4	9	5	0	0	12	4
	F	9	11	16	10	1	3	26	9
	G	4	5	9	5	0	0	13	5
	H	15	18	35	21	7	23	57	20
	I	6	7	4	2	0	0	10	4
TOTAL	-	83	-	164	-	31	-	278	-
24	A	8	7	8	5	2	6	18	6
	B	30	27	47	27	7	23	84	27
	C	22	20	32	19	3	10	57	18
	D	10	9	13	8	0	0	23	7
	E	13	12	20	12	5	16	38	12
	F	9	8	14	8	4	13	27	9
	G	6	5	14	8	6	19	26	8
	H	6	5	5	3	0	0	11	4
	I	6	5	19	11	4	13	29	9
TOTAL	-	110	-	172	-	31	-	313	-
25	A	19	15	36	17	7	23	62	17
	B	2	2	11	5	4	13	16	4
	C	7	5	13	6	3	10	23	6
	D	44	34	70	34	9	29	123	34
	E	7	5	12	6	2	6	21	6
	F	20	16	18	9	1	3	39	11
	G	2	2	1	0	0	0	3	1
	H	25	20	44	21	5	16	74	20
	I	2	2	1	0	0	0	3	1
TOTAL	-	128	-	206	-	31	-	365	-

Table 6A-1. Frequency of Response of Aides and Teachers to Questions 1 through 32 of Kindergarten Teacher/Aide Questionnaire (cont)

Question Number	Response	Aides		Teachers				Total	
				With Aides		Without Aides			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
26	A	16	12	16	8	1	3	33	9
	B	37	28	42	21	3	10	82	22
	C	27	21	42	21	4	13	73	20
	D	3	2	1	0	1	3	5	1
	E	4	3	18	9	6	19	28	8
	F	2	2	8	4	3	10	13	4
	G	11	8	26	13	7	5	44	12
	H	3	2	3	1	0	0	6	2
	I	28	21	47	23	6	19	81	22
TOTAL	-	131	-	203	-	31	-	365	-
27	A	8	6	13	6	3	10	24	7
	B	41	31	66	31	10	33	117	30
	C	22	16	37	18	5	17	64	17
	D	34	25	55	26	5	17	94	25
	E	7	5	10	47	2	7	19	5
	F	4	3	3	1	1	3	8	2
	G	2	15	1	0	0	0	3	1
	H	12	9	20	9	4	13	36	10
	I	4	3	6	3	0	0	10	3
TOTAL	-	134	-	211	-	30	-	375	-
28	A	28	22	38	18	1	4	67	18
	B	1	1	2	1	0	0	3	1
	C	10	8	19	9	2	7	31	9
	D	5	4	5	2	1	4	11	3
	E	9	7	20	10	4	15	33	9
	F	28	22	49	23	6	22	83	23
	G	9	7	22	10	7	26	38	10
	H	6	5	9	4	0	0	15	4
	I	32	25	46	22	6	22	84	23
TOTAL	-	128	-	210	-	27	-	365	-
29	A	7	5	10	5	2	7	19	5
	B	41	31	64	30	10	33	115	31
	C	17	13	21	10	3	10	41	11
	D	35	27	56	27	5	17	96	26
	E	7	5	11	5	4	13	22	6
	F	3	2	3	1	0	0	6	2
	G	3	2	5	2	3	10	11	3
	H	15	11	32	15	3	10	50	13
	I	3	2	9	4	0	0	12	3
TOTAL	-	131	-	211	-	-	30	372	-

Table 6A-1. Frequency of Responses of Aides and Teachers to Questions 1 through [illegible] of Kindergarten Teacher/Aide Questionnaire (cont

Question Number	Response	Aides		Teachers				Total	
				With Aides		Without Aides			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
30	A	28	26	36	17	2	7	66	19
	B	1	1	3	1	0	0	4	1
	C	9	8	20	10	1	3	30	9
	D	5	5	3	1	3	10	11	3
	E	14	13	31	15	4	13	49	14
	F	15	14	50	24	8	27	73	21
	G	8	7	18	9	4	13	30	9
	H	6	6	11	5	3	10	20	6
	I	22	20	36	17	5	17	63	18
TOTAL	-	108	-	208	-	30	-	346	-
31	A	18	15	34	16	4	13	56	16
	B	0	0	5	2	0	0	5	1
	C	1	1	3	1	1	3	5	1
	D	37	30	70	34	10	33	117	33
	E	6	5	8	4	2	7	16	4
	F	18	15	19	9	3	10	40	11
	G	1	1	4	2	0	0	5	1
	H	34	28	58	28	9	30	101	29
	I	7	6	6	3	1	3	14	4
TOTAL	-	122	-	207	-	30	-	359	-
32	A	12	10	14	8	3	12	29	9
	B	37	30	46	25	8	31	91	27
	C	29	24	45	24	7	27	81	24
	D	3	2	3	2	0	0	6	2
	E	8	7	12	7	1	4	21	6
	F	3	2	11	6	0	0	14	4
	G	5	4	14	8	3	12	22	7
	H	2	2	3	2	0	0	5	2
	I	23	19	36	20	4	15	63	19
TOTAL	-	122	-	184	-	26	-	332	-

Table 6A-2. Frequency of Response and Variance of Aides and Teachers, Questions 33 through 100 of Kindergarten Teacher/Aide Questionnaire

Question Number	Aides			Teachers			t-Ratio	Significance Level
	Number	Mean	Variance	Number	Mean	Variance		
33	46	2.33	0.52	67	2.25	0.68	0.541	NS
34	46	3.89	1.18	68	3.59	0.95	1.507	NS
35	46	3.30	1.08	68	2.96	0.87	1.787	NS
36	46	4.11	1.18	68	4.03	0.97	0.400	NS
37	46	3.02	1.28	68	2.93	0.66	0.465	NS
38	45	2.53	1.09	68	2.19	0.66	1.848	NS
39	45	2.22	0.62	67	2.30	0.54	0.543	NS
40	45	3.53	1.14	68	3.10	0.95	2.170	0.05
41	46	2.30	1.12	69	2.28	0.58	0.111	NS
42	46	2.76	1.27	69	2.83	0.84	0.351	NS
43	46	1.85	0.43	68	2.22	0.64	2.695	0.01
44	46	3.11	0.92	69	2.56	0.71	3.166	0.01
45	46	4.04	1.22	68	4.43	0.70	2.033	0.05
46	46	3.02	1.11	69	3.14	0.61	0.660	NS
47	46	3.02	4.67	63	3.33	0.79	0.918	NS
48	43	2.60	0.61	66	2.61	0.72	0.063	NS
49	44	4.00	1.48	67	3.84	0.94	0.733	NS
50	44	2.20	0.89	67	2.13	0.56	0.414	NS
51	57	7.35	2.02	76	7.16	0.92	0.871	NS
52	58	5.76	3.80	76	5.10	4.67	1.852	NS
53	59	5.17	5.12	75	5.56	4.27	1.029	NS
54	59	2.85	5.59	76	2.91	5.24	0.148	NS
55	59	7.98	1.03	76	7.75	2.27	1.057	NS
56	59	7.52	1.44	75	7.51	1.45	0.048	NS
57	57	2.56	5.65	76	1.83	3.17	1.945	NS
58	59	5.64	8.56	76	5.84	5.74	0.426	NS
59	59	6.10	3.82	76	6.76	1.34	2.300	0.05
60	59	6.44	3.09	76	6.46	2.78	0.067	NS
61	59	4.63	6.91	76	6.04	3.75	2.460	0.05
62	59	7.15	3.69	77	7.09	2.06	0.201	NS
63	59	4.60	6.28	77	3.96	4.04	1.605	NS
64	59	4.78	7.12	77	4.22	6.25	1.246	NS
65	58	2.41	5.35	76	2.46	4.33	0.129	NS
66	58	5.05	6.22	75	4.99	6.28	0.137	NS
67	59	3.49	4.56	77	3.69	3.70	0.565	NS
68	57	5.51	4.25	76	5.34	5.15	0.451	NS
69	59	5.39	6.17	77	5.00	5.58	0.927	NS
70	59	3.30	5.16	77	3.47	6.38	0.412	NS

Table 6A-2. Frequency of Response and Variance of Aides and Teachers, Questions 33 through 100 of Kindergarten Teacher-Aide Questionnaire (cont)

Question Number	Aides			Teachers			t-Ratio	Significance Level
	Number	Mean	Variance	Number	Mean	Variance		
71	59	5.85	4.64	77	5.43	5.72	1.071	NS
72	58	5.31	6.90	76	4.95	5.13	0.834	NS
73	57	5.70	4.81	77	4.52	4.60	3.108	0.01
74	56	4.66	5.83	75	4.56	4.86	0.243	NS
75	57	5.70	4.66	74	5.07	4.82	1.644	NS
76	58	3.31	6.42	76	3.67	7.08	0.797	NS
77	59	6.19	5.68	77	5.73	6.12	1.097	NS
78	55	5.22	4.24	75	3.95	7.04	3.072	0.01
79	59	2.12	6.78	76	1.46	3.83	1.623	NS
80	59	5.41	4.44	77	4.68	5.73	1.887	NS
81	56	6.68	2.61	77	6.30	4.03	1.206	NS
82	59	5.81	3.07	77	5.28	3.68	1.677	NS
83	59	4.73	5.15	77	4.32	6.08	1.006	NS
84	59	2.58	4.35	77	2.80	4.99	0.591	NS
85	59	5.97	5.46	77	5.79	3.20	0.492	NS
86	59	4.66	3.17	76	3.96	4.14	2.128	NS
87	59	6.37	3.83	77	6.10	0.76	0.988	NS
88	59	4.39	6.00	77	5.16	4.86	1.897	NS
89	58	4.69	5.97	77	3.69	5.37	2.407	0.05
90	58	3.41	4.49	73	2.63	4.40	2.044	0.05
91	57	3.56	4.39	77	3.78	4.54	0.597	NS
92	59	6.61	4.61	77	6.56	4.69	0.134	NS
93	57	5.39	7.26	75	5.72	5.96	0.726	NS
94	59	5.15	5.99	77	5.57	5.67	1.004	NS
95	59	2.78	3.66	76	2.75	2.42	0.098	NS
96	57	4.39	6.66	74	4.30	5.24	0.208	NS
97	58	6.88	4.97	75	6.51	2.17	1.093	NS
98	58	2.57	6.21	75	1.92	2.90	1.703	NS
99	58	6.50	2.87	76	6.63	1.97	0.473	NS
100	58	6.59	2.45	76	6.00	3.29	2.017	0.05

KINDERGARTEN TEACHER AND KINDERGARTEN AIDE QUESTIONNAIRE

This questionnaire is being given in connection with the evaluation of Title I programs which are funded by the Federal Government. All your responses may be made in the booklet itself. Please use a pencil. When you have completed the questionnaire, seal it in the return envelope and drop it in the mail. Postage has been prepaid.

Please be frank in your responses. You will not be individually identified, and the responses will be reported to the Board of Education in the form of group data only. The responses to this questionnaire will help in revising and improving the Kindergarten Aide Program.

A list of school Code Numbers is inside the booklet.

I. Write the Code Number of your school:

____

II. Write the room number(s) of your kindergarten classroom(s).

____

III. Circle the number of your sex:

1. Male
2. Female

IV. How many years experience in the kindergarten classroom have you had?

CIRCLE ONE NUMBER

1. Less than one
2. One
3. Two
4. Three
5. Four to five
6. Six to ten
7. Eleven to twenty
8. More than twenty

V. What is the level of your education?

CIRCLE ONE NUMBER

1. Eighth-grade graduate
2. Some high school, but did not graduate
3. High-school graduate
4. Some college
5. College degree
6. Postgraduate degree

VI. What is your position in the kindergarten classroom?

CIRCLE ONE NUMBER

1. Kindergarten aide
2. Kindergarten teacher with an aide
3. Kindergarten teacher without an aide
4. Other: (Specify)__________

If you are a kindergarten teacher *without* an aide, skip items 1 through 10. Start with item 11.

1. On the average, about how many hours per week did the aide spend on non-kindergarten duties?

CIRCLE ONE NUMBER

1. None
2. One or two
3. Three or four
4. Five or six
5. More than six

2. On the average, about what portion of classroom time was spent in activities where the aide and the teacher worked closely with each other?

CIRCLE ONE NUMBER

1. 0% - 20%
2. 21% - 40%
3. 41% - 60%
4. 61% - 80%
5. 81% - 100%

3. On the average, about what portion of classroom time was spent where the aide and the teacher were working in activities independently of each other?

CIRCLE ONE NUMBER

1. 0% - 20%
2. 21% - 40%
3. 41% - 60%
4. 61% - 80%
5. 81% - 100%

4. On the average, how many times per week did the aide and the teacher hold planning sessions?

CIRCLE ONE NUMBER

1. None
2. One
3. Two
4. Three
5. Four or more

5. On the average, how many hours per week did the teacher and aide spend in planning classroom activities?

CIRCLE ONE NUMBER

1. Less than 1 hour
2. 1 - 2 hours
3. 3 - 4 hours
4. 5 - 6 hours
5. 7 or more hours

6. Estimate the portion of faculty meetings the aide attended (during the period of employment).

CIRCLE ONE NUMBER

1. None
2. About 1/4
3. About 1/2
4. About 3/4
5. All

Items 7 through 50 concern the classroom functions performed by the kindergarten teachers and aides. Read over the "List of Categories of Functions" (enclosed) before responding to the items. The functions are divided into nine categories, lettered A through I; specific functions within categories have been numbered.

7. Before your participation in the aide program, which three of the nine categories had you planned to be the least important functions for the aide?

CIRCLE THREE LETTERS

A B C D E F G H I

8. Before your participation in the aide program, which three of the nine categories had you planned to be the least important functions for the teacher?

CIRCLE THREE LETTERS

A B C D E F G H I

9. Before your participation in the aide program, which three of the nine categories had you planned to be the most important functions for the aide?

CIRCLE THREE LETTERS

A B C D E F G H I

10. Before your participation in the aide program, which three of the nine categories had you planned to be the most important functions for the teacher?

CIRCLE THREE LETTERS

A B C D E F G H I

If you are a kindergarten teacher *without an aide,* read the instructions preceding item 7 and begin with item 11.

11. Of the separate functions listed in the nine categories, which ones does the aide take over completely (teacher does not participate)?

CIRCLE THE NUMBERS OF SUCH ACTIVITIES:

A	B	C	D	E	F	G	H	I
11	21	31	41	51	61	71	81	91
12	22	32	42	52	62	72	82	92
13	23	33	43	53	63	73	83	
14	24		44	54			84	
15	25		45					
	26		46					
	27		47					
	28							

12. Of the separate functions listed in the nine categories, which ones does the teacher take over completely (aide does not participate)?

CIRCLE THE NUMBERS OF SUCH ACTIVITIES:

A	B	C	D	E	F	G	H	I
11	21	31	41	51	61	71	81	91
12	22	32	42	52	62	72	82	92
13	23	33	43	53	63	73	83	
14	24		44	54			84	
15	25		45					
	26		46					
	27		47					
	28							

13. Of the separate functions listed in the nine categories, which are the least valuable performed by the aide?

CIRCLE NO MORE THAN NINE:

A	B	C	D	E	F	G	H	I
11	21	31	41	51	61	71	81	91
12	22	32	42	52	62	72	82	92
13	23	33	43	53	63	73	83	
14	24		44	54			84	
15	25		45					
	26		46					
	27		47					
	28							

14. Of the separate functions listed in the nine categories, which are the least valuable performed by the teacher?

CIRCLE NO MORE THAN NINE:

A	B	C	D	E	F	G	H	I
11	21	31	41	51	61	71	81	91
12	22	32	42	52	62	72	82	92
13	23	33	43	53	63	73	83	
14	24		44	54			84	
15	25		45					
	26		46					
	27		47					
	28							

15. Of the separate functions listed in the nine categories, which are the most valuable performed by the aide?

CIRCLE NO MORE THAN NINE:

A	B	C	D	E	F	G	H	I
11	21	31	41	51	61	71	81	91
12	22	32	42	52	62	72	82	92
13	23	33	43	53	63	73	83	
14	24		44	54			84	
15	25		45					
	26		46					
	27		47					
	28							

16. Of the separate functions listed in the nine categories, which are the most valuable performed by the teacher?

CIRCLE NO MORE THAN NINE:

A	B	C	D	E	F	G	H	I
11	21	31	41	51	61	71	81	91
12	22	32	42	52	62	72	82	92
13	23	33	43	53	63	73	83	
14	24		44	54			84	
15	25		45					
	26		46					
	27		47					
	28							

17. If the aide had to be restricted to three functions, which three would you choose to have the aide perform?

CIRCLE THREE LETTERS:

A B C D E F G H I

18. If three aide functions had to be dropped, which three would you choose to have dropped?

CIRCLE THREE LETTERS:

A B C D E F G H I

19. Which three of the nine categories would be the *least* valuable aide functions in the coming year?

CIRCLE THREE LETTERS:

A B C D E F G H I

20. Which three of the nine categories would be the *most* valuable aide functions in the coming year?

CIRCLE THREE LETTERS:

A B C D E F G H I

21. Which three of the nine categories would you expect to occupy the major portion of an aide's time in the coming year?

CIRCLE THREE LETTERS:

A B C D E F G H I

22. Which three of the nine categories would you expect to occupy the smallest portion of an aide's time in the coming year?

CIRCLE THREE LETTERS:

A B C D E F G H I

23. In which of the categories does the aide need the most supervision?

CIRCLE THREE LETTERS:

A B C D E F G H I

24. In which of the categories does the aide need the least supervision?

CIRCLE THREE LETTERS:

A B C D E F G H I

25. Which three of the nine categories require the major portion of the teacher's time?

CIRCLE THREE LETTERS:

A B C D E F G H I

26. Which three of the nine categories require the smallest portion of the teacher's time?

CIRCLE THREE LETTERS:

A B C D E F G H I

27. Which three of the nine categories require the major portion of the aide's time?

CIRCLE THREE LETTERS:

A B C D E F G H I

28. Which three of the nine categories require the smallest portion of the aide's time?

CIRCLE THREE LETTERS:

A B C D E F G H I

29. Which three of the nine categories are the most important functions for the aide?

CIRCLE THREE LETTERS:

A B C D E F G H I

30. Which three of the nine categories are the least important functions of the aide?

CIRCLE THREE LETTERS:

A B C D E F G H I

31. Which three of the nine categories are the most important functions of the teacher?

CIRCLE THREE LETTERS:

A B C D E F G H I

32. Which three of the nine categories are the least important functions of the teacher?

CIRCLE THREE LETTERS:

A B C D E F G H I

33-41. About how much time per week, on the average, does the aide spend on activities in each category?

CIRCLE ONE NUMBER FOR EACH CATEGORY:

	33.	34.	35.	36.	37.	38.	39.	40.	41.
CATEGORIES:→	A	B	C	D	E	F	G	H	I
No time	1	1	1	1	1	1	1	1	1
One hour or less	2	2	2	2	2	2	2	2	2
Two to three hours	3	3	3	3	3	3	3	3	3
Four to five hours	4	4	4	4	4	4	4	4	4
Six hours or more	5	5	5	5	5	5	5	5	5

42-50. About how much time, on the average, does the teacher spend on activities in each category?

CIRCLE ONE NUMBER FOR EACH CATEGORY:

	42.	43.	44.	45.	46.	47.	48.	49.	50.
CATEGORIES:→	A	B	C	D	E	F	G	H	I
No time	1	1	1	1	1	1	1	1	1
One hour or less	2	2	2	2	2	2	2	2	2
Two to three hours	3	3	3	3	3	3	3	3	3
Four to five hours	4	4	4	4	4	4	4	4	4
Six hours or more	5	5	5	5	5	5	5	5	5

INSTRUCTIONS FOR ITEMS 51 THROUGH 100

In items 51 through 100 you are asked to indicate the degree to which you agree with each statement about kindergarten children.

For example:

X. Most kindergarten children prefer red to blue.

6

0	1	2	3	4	5	6	7	8	9
Very Strongly Disagree		Disagree		Very Slightly Disagree	Very Slightly Agree		Agree		Very Strongly Agree

The person responding to the example item felt that their degree of agreement with the statement was between "slightly agree" and "strongly agree", and indicated this by writing a "6" on the line.

If you strongly disagree with the statement, then you would write a "0" on the line after the item. If you strongly agree with the item, then you would write a "9" on the line after the item. If you feel some other degree of agreement with the statement, then write the number which most closely represents the extent of your agreement with the statement.

Most kindergarten children ...

51. ...will behave well when praised by an adult.

______

52. ...are afraid of being punished when they break a toy.

______

53. ...can distinguish a square from a triangle.

______

54. ...should be punished when agressive.

______

55. ...like to imitate adults.

______

56. ...enjoy the challenge of accomplishing tasks where they use their hands.

______

Most kindergarten children ...

57. ...will be less likely to notice color differences if they know the names of colors.

______

58. ...are not developed physically well enough to ride a two-wheeled bicycle.

______

59. ...can obey red and green traffic signals.

______

60. ...pay little attention to "right" and "left".

______

61. ...can learn the meanings of long words.

______

0	1	2	3	4	5	6	7	8	9
Very Strongly Disagree		Disagree		Very Slightly Disagree	Very Slightly Agree		Agree		Very Strongly Agree

Most kindergarten children ...

62. ...would say a tall jar would hold more than a short jar, although they both were 1-pint jars.

______

63. ...know the difference between "most" and "least".

______

64. ...boys do more yelling and screaming than girls.

______

65. ...will adjust to school more readily if the teacher remains more detached.

______

66. ... have more than three colds per year.

______

67. ... can tie their shoes.

______

68. ...find the best way to overcome their fear of something is to escape from the situation.

______

69. ...rarely speak in complete sentences.

______

70. ...can distinguish a circle from an oval.

______

Most kindergarten children ...

71. ...will become upset of routines are suddenly changed.

______

72. ... like to finger paint more than they like to color with crayons.

______

73. ...wish to be like their parents rather than their brothers or sisters.

______

74. ...who are from homes with only one parent are more aggressive than children from homes with both parents present.

______

75. ...are more afraid of their fathers than of their mothers.

______

76. ...are more curious about sex than about music.

______

77. ...need at least a 20-minute prone rest period every session.

______

78. ...show jealously as an abnormal reaction to loss of affection.

______

79. ...get on my nerves after 2 hours.

______

0	1	2	3	4	5	6	7	8	9
Very Strongly Disagree		Disagree		Very Slightly Disagree	Very Slightly Agree		Agree		Very Strongly Agree

Most kindergarten children ...

80. ...will behave well so as not to lose the affection of the adults in the school room.

______

81. ...are most influenced by their mother in the development of speech.

______

82. ...can copy a square.

______

83. ...don't care whether they play with another boy or a girl.

______

84. ...like to play by themselves, rather than in groups of three or four.

______

85. ...are mildly competitive with each other.

______

86. ...can copy a triangle.

______

87. ...know that it is good behavior not to break things.

______

88. ...are curious about the anatomy of children of the opposite sex.

______

89. ...know the difference between "yesterday", "today", and "tomorrow".

______

Most kindergarten children ...

90. ...will attempt to do a task many times to make sure they do it correctly.

91. ...will not attempt to do a task rather than risk doing it incorrectly.

______

92. ...have not developed racial prejudices.

______

93. ...who are severely punished at home for aggressive behavior will be even more aggressive in school.

______

94. ...know that a dime will buy more than a nickle.

______

95. ...girls do more hitting and fighting than boys.

______

96. ...girls are less dependent on adults than are boys.

______

97. ...enjoy playing outside more than finger painting indoors.

______

98. ...develop physically at the same rate.

______

99. ...can put on their coats by themselves.

______

100. ...know that five objects are more than three objects.

______

LIST OF CATEGORIES OF FUNCTIONS OF KINDERGARTEN AIDES

The Kindergarten Aide may assist the teacher with:

A. Preparation and care of

11. bulletin boards
12. art materials for work period
13. materials needed for science
14. materials used in cooking experiences
15. materials for number and reading readiness games

B. Daily housekeeping responsibilities in the kindergarten by checking

21. supply of paper towels and napkins
22. paints daily for brilliance of color and proper consistency
23. paste jars for contents and cleanliness
24. paint and paste brushes for cleanliness
25. puzzles to see if all pieces are intact
26. children's library books for neatness and necessary mending
27. house keeping area for condition of equipment, cleanliness and attractiveness
28. crayons for useable points and seeing that every color is in each container

C. Supervision of routines in the kindergarten related to

31. care and management of clothing
32. preparation for snack time, clean up of work, toileting, handwashing and table setting
33. collecting money (i.e. milk, trips, Red Cross, etc.)

D. Work Period by

41. writing names and dates in *manuscript* on children's work
42. reading stories and talking about pictures in books to children who are in library area
43. helping a child who is having difficulty putting a puzzle together by pointing out relationships in shapes of puzzle pieces to puzzle form, i.e., "This piece looks round like a wheel. Let us try it where the wheel is and see if it fits."
44. helping individuals and small groups of children, when needed, by encouragement, praise, thoughtful questions and wise guidance with their work activities.
45. playing readiness games with individuals or small groups of children - i.e., flannel board games, lotto, dominoes, etc.
46. holding conversations during the work period with individuals and small groups concerning their activities.
47. guiding individual children in cleaning up work areas, i.e., how to arrange blocks on block shelves, how to clean paste off tables, sand off the floor.

(over)

E. Outdoor play activities

51. help teacher carry any equipment needed outdoors
52. when desirable, join in children's games or play activity on an adult level in a manner that doesn't cause over-stimulation of the children
53. encourage shy children to play
54. retrieve the ball if it goes into the street

F. Music Period by

61. sharing her musical talents, if any
62. operating the record player if asked
63. being a *good* participant by sitting with the group and singing with the children

G. Neighborhood walks or bus trips by

71. taking care of one end of the line while the teacher supervises the other end
72. walking with a child who needs special supervision
73. helping carry any necessary materials needed for walk or trip, i.e., paper towels, napkins, lunch lollipops

H. Building good peer and group relationships by

81. listening to the children during their play
82. sharing with the teacher bits of conversation which are helpful in understanding children
83. drawing aside a child, on the recommendation of the teacher, who seems to be unhappy, so that the child might have someone to listen to him right at that time
84. discussing these conversations with the teacher

I. Emergency situations by

91. staying with children until called for
92. supervising a child who doesn't feel well

SECTION 7

PROJECT 6, REMEDIAL READING

This project was cancelled by the School District of Philadelphia before any part of the program was begun; therefore, no evaluation is possible.

SECTION 8

PROJECT 7, SCHOOL-COMMUNITY COORDINATORS

8-1. PROJECT DESCRIPTION

8-2. Objectives

The stated objectives of the School-Community Coordinator program ("School-Community Coordinator Service for Schools Situated in Disadvantaged Areas") were as follows:

1. To keep the school community oriented to, and informed about, the school program,
2. To keep the school staff informed about community,
3. To engage the community in home-school related projects,
4. To enable the school to participate more readily in community activities,
5. To help families understand and use school and community facilities,
6. To bring back to school staff information gained from home contacts, and
7. To identify parent talents and aid schools in using parents in helpful ways—as sponsors, teacher aides, library aides, and so on.

8-3. Summary of Project

Coordinators were hired through a regular examination process which included an oral examination by a panel (usually three or four people). The panel consisted of school personnel (often the principal of the school involved plus, perhaps, teachers from that school or its counselor) and, as often as possible, a community leader or leaders from the relevant community. To be eligible for the position, coordinators were required to meet the following qualifications:

Reside within the geographical boundaries of the school community;

Have at least a high-school education or its equivalent;

Show an excellent understanding of the community and a warm relationship with the people living there;

Demonstrate leadership ability through participation in community, recreational, church, Home and School Association, or agency activities; and

Possess qualities of loyalty, integrity, good judgment, and intelligence.

As of September 1, 200 coordinators, 3 supervisors, and the assistant director had been hired; an additional 20 coordinators remain to be appointed. Of the 200 coodinators, 13 had been in the Secondary Educational Improvement Program and 6 in the Great Cities Program; these two programs served as pilot programs for the Title I program. Experience of these 200 coordinators ranged from 0 to 6 years.

Essentially, the coordinator serves as a liaison between the school and the surrounding community and/or the community from which it draws its students. Individual coordinators made surveys of parents for talents and for organization of cultural enrichment and community improvement programs. The coordinator's actual function varies widely; at times he may act as a secretary, nurse, job or marriage counselor, psychiatrist, teacher, maid, or in any one of many other roles.

8-4. EVALUATION METHOD

The FIRL evaluation used three main sources of information: the community, the school, and the coordinators themselves. A questionnaire was sent to parents (177 respondents) and another to coordinators with at least 3 month's experience (24 respondents); relevant questions also were included in a Title I survey questionnaire sent to various teachers (198 respondents). These questionnaires seemed the most direct way to obtain information pertinent to the relevant objectives.

The coordinators were instructed to distribute the parents' questionnaires to the 2nd, 4th, 6th, and so forth families visited during the year until questionnaires were distributed to 10 different families. If one of the selected families moved or was unwilling or unable to answer the questionnaire, another even-numbered family was selected to receive the questionnaire. This distribution method eliminates most sampling bias.

An anticipated survey of Home and School Association attendance was not possible because there was no list of Home and School Association officers. However, the coordinators' questionnaire asked for these names so that next year's evaluation can use Home and School Association data.

The school-bond issue in the past election provided an additional evaluation measure in that the results in wards containing schools with coordinators were checked to determine if these wards voted more favorably on the issue.

8-5. RESULTS

On the school-bond issue, wards were rank-ordered by ratio of yes to no votes. They were divided into the groups shown in Table 8-1.

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Table 8-1. Number of Wards, With and Without Coordinator, for High and Low Ratios of Yes to No Votes on School-Bond Issue

Coordinator Presence	Ratio of Yes to No Votes		Total
	Above Median	Below Median	
With coordinator	15	5	20
Without coordinator	18	28	46
Total	33	33	66

The McNemar Test for the Significance of Changes was used; X^2 was found to be 3.93 which, with one degree of freedom, is significant beyond the 0.05 level of confidence.

Specific data from the questionnaires is in the appendices to this section; however, the results are reviewed here.

On the coordinators' questionnaire, the coordinators overwhelmingly agree that they were useful to schools and community, kept each group informed about the other, involved each in the other's activities, increased the understanding between them, and identified parent talents for use in and by the school; that is, the coordinators felt that they fulfilled the objectives of the project.

Table 8-2 shows the data from the multiple-choice part of the questionnaire. The open-ended portion further supported the conclusion that coordinators fulfilled the objectives of the project. (See Appendix 8-A). In the multiple-choice portion, there was no disagreement on any of the items among any of the 24 coordinators who responded. (Note that when the questionnaire was distributed on June 6, the project included only 94 coordinators, 42 of whom met the criterion of 3 months' experience).

Parents agreed with this evaluation. On the parents' questionnaire, everyone who responded to the question of whether the coordinator had been helpful, responded affirmatively; 170 out of the 177 who responded felt more comfortable visiting the school because of the coordinator, and so on. Appendix 8-B shows these results.

The teachers also feel the program is valuable. Most teachers felt that understanding between school and community was better, that parents were more responsive to their inquiries and requests, and that community opinion of the school and students' attitudes toward the school had improved as a result of the coordinators' work. In addition, a majority of the teachers felt that home environments were better after the coordinator project than before. Table 8-3 shows these results selected from an overall survey of teachers' attitudes on Title I projects. The sample included 198 teachers from 18 schools. These teachers were all from schools with coordinators; each taught in one of the following Title I projects: Multi-faceted, Multiphase Program of Staff Development; Innovative Program Providing Art Teachers for the Education of the Disadvantaged Child on the Elementary Level; Audio —Lingual

Table 8-2. Responses to Multiple-Choice Questions Given to Coordinators

Question	Responses*				
	A	B	C	D	EFG
1. I have been useful for the school.	15	9	0	0	0
2. I have been useful for the community.	16	8	0	0	0
3. I have kept the community informed about school programs.	11	13	0	0	0
4. I have kept the school informed about community programs.	10	14	0	0	0
5. I have involved the community in home-school related projects.	5	17	2	0	0
6. I have helped the school do more in community projects and activities.	6	14	1	3	0
7. I have helped families understand and use school and community facilities.	7	16	1	0	0
8. I have gotten and passed on information helpful (and not confidential) to the school, gathered from home contacts.	12	11	1	0	0
9. I have helped find parent talents, and aided the school in using parents in helpful ways (sponsors, aides, etc.).	3	15	4	2	0
10. As a result of my work as coordinator, parents are more available to the school for discussion.	10	10	3	1	0
11. As a result of my work as coordinator, parents are more available to the school for activities.	7	12	4	1	0
12. As a result of my work as coordinator, parents feel more at ease with school personnel.	13	8	3	0	0
13. As a result of my work as coordinator, parents act more cooperatively toward the school.	10	12	2	0	0
14. As a result of my work as coordinator, some parents are providing, within the home, conditions needed to help children improve in school.	8†	9	6	0	0
15. As a result of my work as coordinator, some children are more likely to stay in school.	9	12	1	2	0

*A: Strongly Agree
B: Agree
C: Slightly Agree
D: Neither Agree nor Disagree
E: Slightly Disagree
F: Disagree
G: Strongly Disagree

†One did not answer this item.

Curriculum in French and Spanish in Seventh Grade, or Classes for Academically and Potentially Able Students. The results show that the teachers' responses to the project are quite favorable, but not as favorable as those of parents or coordinators. As one coordinator suggested, this may be because teachers have not really been informed about the program.

Table 8-3. Results of Items Selected from the Overall Title I Survey

Question	Responses*				
	A	B	C	D	E
1. As a result of the School-Community Coordinator's work, community understanding of the school has developed.	52	79	46	13	6
2. As a result of the School-Community Coordinator's work, parents are more responsive to teachers' inquiries and requests.	38	86	49	18	4
3. Community opinion of the school has improved due to the School-Community Coordinator's work.	27	89	59	16	4
4. Student attitudes toward school have improved due to the School-Community Coordinator's work.	20	68	78	23	5
5. As a result of the School-Community Coordinator's work, the school's understanding of the community has improved.	30	82	59	19	3
6. As a result of the School-Community Coordinator's work, parents have provided better home environments for their school-aged children, particularly better environments for school work.	10	42	81	25	8
7. As a result of the School-Community Coordinator's work, pupils and parents have been more cooperative with the school.	19	79	48	16	3

*A Strongly agree with the statement.
B: Agree with the statement.
C: Are indifferent to the statement.
D: Disagree with the statement.
E: Strongly disagree with the statement.

8-6. DISCUSSION

Although the project plan called for an initial training program for the coordinators, it was not possible to implement this because the coordinators were appointed a few at a time. Therefore, coordinator training was varied. Some of the coordinators were in the pilot programs and were already trained when this Title I project began; others attended a few group sessions where they received some orientation. However, from August 25 to 31 it was possible to gather all coordinators for a seminar-training period that provided concentrated training.

In the judgment of project personnel, the success of a coordinator comes about mainly because of his character; therefore the postponement of training did not detract from the project. The imaginative character of the coordinators selected also permitted them to function without a great deal of supervision. This imagination is indicated by the number and variety of community projects initiated by the coordinators.

8-7. CONCLUSIONS

From all three of the points of views investigated (teachers', parents', and coordinators'), this program has been extremely useful. With regard to both influence and information transmission, the coordinators have done their jobs well. The coordinators were well chosen; they are leaders, people respect them, listen to them, and talk to them. They are members of the community that they and the school serve, and this has been very important to all involved. They work extremely hard, as can be seen by the activities they are engaged in and the many visits they make (Appendix 8-A).

The weaknesses of the program stem from newness and novelty. Not everyone is sure what a coordinator is supposed to be or do. However, a brochure is being prepared, and in time, the information will spread.

8-8. RECOMMENDATIONS

The evaluation has led to the following recommendations for this project:

1. Continue the project;
2. Institute a massive orientation program to explain the coordinators' function to coordinators, parents, teachers, and administrators;
3. Encourage the coordinator to continue an imaginative approach to school-community problems;
4. Provide coordinators for all schools;
5. Develop better communication between individual coordinators and between supervisors and coordinators;
6. Compensate and provide assistance for the coordinators, if possible; in any case, commend and encourage their excellent and, perhaps, vital service;
7. Check Home and School Association attendance figures to determine the effect of this project;
8. Interview school principals to determine their opinions of the project;
9. Use a random-sampling method to select parents to be questioned in the evaluation; this is a tedious and time-consuming job since there is no list of parents familiar with the project;
10. Use the following coordinator records in future project evaluations: Log of Daily Activities, Monthly Summary of Daily Activities, and Referral Form (cases referred to the coordinator); and
11. Institute meetings at which the coordinator will interpret the community to teachers and school administration.

APPENDIX 8-A
ANSWERS TO OPEN-ENDED QUESTIONS TO COORDINATORS

APPENDIX 8-A

ANSWERS TO OPEN-ENDED QUESTIONS TO COORDINATORS

Note: Some answers are direct quotes, others paraphrases.

Questions	Answers
1. How many visits do you make to parents in an average month?	Average was 45 to 50. The range was from 8 to 300 (10 per day).
2. How long does an average visit last?	Average was 30 minutes. The range was from 15 to 90 minutes.
3. What sort of activities have you involved parents in?	In general, 4 or 5 activities were listed. Some were: PAAC, Music, Discussions, Health Clinic, Home and School Association, Community Betterment and Development, Law Enforcement Action Group, Cake Sale, Polls (bond issue), Scouting, Sunday School, Garden Club, Trips and Visits, Christmas Gifts for the Needy and Sick, Homework Assistance, Homeroom Mothers, Boys Clubs, and Church Activities.
4. Have you influenced parents through their children? If so, how?	- Not sure. - Pride in children through knowing their abilities and the school's offerings in these areas. - Showing an interest in them; children then speak of the coordinator to their parents. - By showing sympathy and giving assistance. - Talk to children, they talk to their parents. - Get help for youth program. - Children bring their parents to Home and School Association meetings. - Involve children in community programs; these lead to contacts for the future. - Children learn awareness of self (improve in dress, neatness, health and study habits); this carries over to parents. - Provide clothing for children. - Children asked their parents to chaperone the cultural enrichment programs. - Encourage parents to listen more to their children and to help them with their homework.
5. Have you begun any special programs or awards in your school (such as "Good Neighbors Program", "Citizenship Award")? If so, which?	Citizenship Award (6), Book Club (parents), Tutoring, Mother-Daughter Night, Father-Son Night, Achievement and Service Award, Citizenship Program (2), Good Neighbors Program, Achievement Award. Three programs are in preparation; seven coordinators have none and indicated no plans for future programs. One school had such a program before the coordinator arrived and one has a Home and School Association sponsored program.

Appendix 8-A, continued

6. Have you been successful in involving school personnel in community affairs? How?	Yes (12), No (2), In the future (4), Not involved but informed (2), Trying but not yet successful (4). Activities in which school personnel have been involved include cake sales, Home and School Council dinner, Civic Association, Scouting, speaking at community meetings, consultation, various committees, poster-making, music, block meetings, cultural events and North City Congress Festival (2). Several coordinators reported that asking for help from teachers got responses from them.
7. Have communications between school and community changed while you were coordinator? How?	Yes (21). No (1 - who said that they had always been good, and that she had just maintained them). Too early to tell (1). Some of the answers to "How?" were: - More cooperation. - More organization in the community. - Come to school for help with children. - Helped with bazaar. - More informed. - Community understands better. - Send articles to neighborhood newspaper. - More accessible. - Community looks forward to more school programs.
8. What are typical parental attitudes toward the school now? Have they changed since the Coordinator Program(s) began? If so, how?	- A few have changed. - Looking to the fall for more change. - Just now establishing rapport - there was little home-school community before. Now the parents are listening more. - Still wary. - Tremendous change, much more comfortable and at ease. - Apathy. - Parents now know someone (the coordinator) at the school with whom they can communicate. - Not sure. - Parents becoming more aware that the school provides needed things for their children. - Better response, parents feel now that the school is concerned about their children's problems and about their own problems. - Have passed on much information to parents. - Parents are more willing to participate both personally and finanacially. - More interest but little basic change in personalities except the parents are more hopeful; they feel that the coordinator can help them with their problems. - Parents now realize that there is someone at the school who represents them at all times. - I can detect more self-assurance and more respect for the system of education and

Appendix 8-A, continued

	enthusiasm about the programs and joy over some of the benefits which their children are receiving and more dignity in their behavior while at school. - Parents are more cooperative and interested and are no longer reluctant to consult with school personnel.
9. Are there any major differences between the coordinator's jobs at the elementary, junior, and senior high levels? Please be specific.	- For elementary schools, the community is located around the school more; as you go on to junior high and senior high schools, the communities are more widespread. - In high school, children think themselves more grown-up, so they don't take messages home. - As far as working with people (families) none, but secondary school children have expanding interests, coupled with restlessness, and a need for new experiences and recognition. Unless coordinators recognize this, they won't be able to cope with their problems at home and in school. - Closer ties are possible at the elementary level (with parents). - More social problems in high school. - Elementary schools try to give a wholesome outlook. High schools try to change poor outlooks. - The problem of drop-outs is a high school problem only. - Parents have more control over elementary school children. - Elementary school coordinators deal with health, lateness, clothing, and failing to do work. High school coordinators deal with gangs, serious health problems, and ingrained problems. - Elementary school parents are younger, and understand faster. - High school coordinators must talk to the child as well as the parent. - Elementary school problems are more likely due to parental neglect. - Elementary schools have fewer students, so closer relationships with coordinators are possible.
10. What are typical teacher's attitudes toward parents and the community? Have they changed while you were coordinator? If so, how?	- Happy to have a coordinator - a contact with the community. - Teachers believe parental lack of concern exists, and teachers are not interested in the community. - Trying to get teachers to understand parents - in process. - Teachers understand better, since coordinator has spoken both to teachers and parents. - Teachers feel parents are not cooperative enough. - Teachers have been traditionally helpful; they know that "communication begins in the community". - Parents avoided contact due to fear of becoming annoying to school personnel. - Wonderful attitude on the part of the teachers; they are glad to see parent come,

	especially if it is the parent's first visit. - Teachers have found that most parents do care, whereas parents didn't care before the Home-Community Coordinator program. - Good attitude traditionally. - Some teachers go out of their way to help parents, while others talk down to them. Some improvement. - Teachers use notes to contact parents - makes coordinator's job pleasant. - Teachers understand problems facing parents and recognize the coordinator's part in getting parents out to meetings, etc. - Teachers are usually interested in their own children, and so cannot understand parents' lack of interest. - Good teachers are interested in parents as a way to help understand their students. - Conferences help both teachers and parents - (1) Parents become more interested in the child (and the school and the teacher). (2) The teacher understands the situation better; this leads to more concern and effort on his part. - There is a great gap between the comfortable life of the teacher and the harried one of many parents; coordinators have closed the gap some. - After the coordinator's visits, parents who would not visit the school before (even when asked to) visited the school. - Teachers are now more tolerant.
11. What are your major contributions to better relations and understanding between community and school?	- Friends to both. - Cooperation of business. - Former students have maintained interest in school-community programs. - More parents come more often to school. - Better Home and School Association. - Help for block organization. - Start by improving own understanding. - Keeping each (community and school) informed of the activities and interests of the other. - Working for a closer relationship between parents and teachers. - Getting the use of school facilities for community events. - Visiting - personal contact. - Referring parents to programs and services they were not aware of (e.g. financial aid, health centers). - Untiring effort. - Referring community people to the school with their services.

	- Source of information for both community and school. - Attitude of humility and fair play for everyone whom I meet in my work. - Respect for people. - Survey of the community to see what the school can do to arouse their interest. - Established Home and School Association.
12. What are the big needs and problems to be faced for better community - school relations and understanding?	- End student littering and disrespect for property. - Apathy of parents toward school. - Frank communication. - Awareness of problems. - Dedicated people. - Parent participation in school activities. - Teachers to learn more about the community. - Open minds and objectivity. - Recognition of the need for home and school unity - purpose: education for children. - Reaching the hard core as well as the more affluent members of the community. - For teachers and principals to help welcome parents. - For coordinators to encourage parents to get into community activities. - Cooperation between home and school. - Help with housing, money, and education (for parents). - For the school to build its program around community needs. - Wider use of the school by the community. - Follow-ups on referrals and/or problems until resolved. - Closer teacher contact. - A two-way bulletin: school and community. - Need to involve more fathers in both school and community. - Visitation to get more parents out to school. - Sell the community the idea of our real interest in the children's welfare and futures and the importance of their education to us and the community. - Higher standards of living for many families. - Teachers should try harder to win parental confidence. - Many parents need more education and training. - Community needs to arise and use every resource to fight poverty, crime, and disease; motivation must come from both home and school. - Understanding. - For coordinators to attend community meetings and inform them of school activities.

	- Housing, jobs. - School to be open evenings for parents to meet personnel. - Parents need to be more interested in their own children. - Fewer taprooms. - More adult education programs in schools.
13. What community activities are you involved in?	(Average about five per coordinator). Church, Boys Club, Tenant-Landlord Pact for Better Living, Clean Blocks, Health Center, United Fund, Walton Center, Sunday Schools, Scouting, Street Captain, Home and School Council, NCC, Urban League, NAACP, Fellowship House, Ladies Auxiliary, PAAC, NCIC, Volunteer Resources Council, Community Council, concert series, playground association, Red Cross, Parent-Youth Aid Committee, YWCA, YMCA, North City Congress, Our Neighbor Association, 4H, Home and School Association, and Garden Association.
14. Please comment below as seems helpful.	Comments regarding the coordinator and his work: - Sometimes act as a marriage counselor. - Find "A Parent's Prayer" helpful. - Coordinator is in the position of non-professional among professionals, so there is the possibility of resentment. - Coordinators must have tact, self-disciplina, and a knowledge of and liking for people. - Started from scratch. Problem was to get parents interested. Have a telephone squad. The Sanitation Department cooperated in organizing massive clean-up days. Police removed many abandoned cars and kept the corners clear of loiterers. - It is a good idea to be involved in as many community and school activities as possible. Gather as many ideas as possible. - Parents are more apt to trust the coordinator - "one of us". - Need opportunities for coordinators to go to out-of-state seminars for personal growth. - Need workshops for coordinators, in inter-group relations. - Need opportunities for coordinators to plan for and get help for exchange students from other countries. - Coordination is needed between elementary, junior high, and senior high schools, and follow-up of students. - Guidelines are needed for the total coordinator program. - Coordinators need information on all sorts of services - medical,financial, and vocational, as well as educational. - Job responsibilities of the coordinator need to be clarified. - Monthly newspaper for coordinators would be advisable. - Remember that this program (and your job) is just starting; this is a long-term job and the long-term goal of understanding is the important one.

Appendix 8-A, continued

- Inter-coordinator communication would be helpful.
- Coordinator needed at the school during its hours - visiting parents ask to see him (for example, while waiting for the principal) and he is helpful as a welcomer of new parents.
- Coordinator needs a private office in the school so that parents can talk freely.

Comments regarding school personnel:
- One possible problem: if the principal is of a different race from the majority of the community, he must take special pains to communicate.
- Parents are generally more happy about the program than teachers. Teachers are not well informed about it, and need to be better informed; in particular they need to know what the coordinator's proper role is, and that he is not just for the "dirty work".
- Total committment to the program is needed by all school personnel.
- It is important that the staff and principal accept the coordinator.

Comments regarding parents:
- Parents, like children, need to know that someone is interested in them.
- Many mothers should see a home consultant - learn to manage income.
- Workshops are needed to show parents better housekeeping, child care, and community living.
- Trips to colleges and universities are a good idea for parents as well as children.

Comments regarding children and their needs:
- More after-school acitivites are needed for more children.
- Need full-time nurse, more full-time teachers, more music education, drama classes, and more involvement for the children.
- Need a more convenient health center, more convenient recreation centers and playgrounds.
- Need buses for children's trips during summer.

APPENDIX 8-B

RESULTS OF AN OPEN-ENDED QUESTIONNAIRE TO PARENTS

APPENDIX 8-B

RESULTS OF AN OPEN-ENDED QUESTIONNAIRE TO PARENTS

Note: Some answers are direct quotes, others paraphrases.

Questions	Answers
1. How many times has the school - community coordinator been to see you?	Ranged from 1 to 25, with a mean of 3.8. Twenty-two gave answers like "several" or "many". These are not included in the calculation of the mean.
2. Was he or she helpful? If so, how?	All 177 either said yes or just described how he or she was helpful. Some of the descriptions included comments about better house, job information (3), encouragment of further education, activities for children (2), bring messages, helped with problems with children, kept informed about school activities (17), tutoring, reading help for child (2), aroused interest in the community, explained (something) so that parent understood, sent to appropriate help (5), helped get parents interested (2), listened (2), helped parents understand their children, gave a new outlook on school activities and how parents may help (4), explained how home and school cooperation is necessary (4), informed about and/or registered children for Operation Head Start (10), let her know the school cared about her and her child (2), told how child was doing in school (10), got children to school on time (5), set up appointment with a teacher, informed parent of his possible advice to the school and to the community (2), explained the school's programs (12), helped parent to understand the school's position, stopped child's cutting classes (6), stopped drop-out(2), helped with clothing, showed interest in someone who was sick or hurt (visited, took home) (11). Not all parents gave descriptions.
3. Has the coordinator made you feel more comfortable about visiting the school?	Yes (170). No (1). Not clear in his response (6).
4. Do you feel that you understand the school and its teachers and principals better because of the coordinator?	Yes (168). No (3). Perhaps (1). Not clear in his response (2). One of the "no" respondents added, "I think I did it on my own".
5. Have you been to more school activities (like the Home and School	

Association) since you first talked to the coordinator? If so, please list the activities.	Yes (108). No (51). Many of the "no" respondents gave an explanation - 8 were incapacitated, 12 said they were planning on starting in the fall, many said they worked. The activities included Home and School Association (42), unspecified community meetings (11), unspecified school activities (13), school or class trips (10), PTA (12), scouting (6), Fairmount Park May Day (2), Wharton Center (2), sewing (2), cooking, work shops (10), discussion groups (10), teas, luncheons, and/or dinners (12), cake sales, jamborees, fairs and bazaars (11), volunteer work, open house (11), "Night of the Arts" (8), American Education Week (6), Neighborhood tour, Negro History Week, music and concerts (4), PAAC, Operation Get-Set, theatre, (5), Youth-Parents Aid (3), North City Congress (3), new parent teas (5), Schools-on-Parade, YWCA, homeroom mothers (2), Parents for Educational Progress, parent visitation (2).
6. Have you been to the school more since you first talked to the coordinator?	Yes (137). No (27) - 6 were sick or incapacitated. Maybe (1). Response not clear (3).
7. Have you and the coordinator talked about home, family, or community problems which you might have? If so, how have these talks been helpful?	Yes (148). No (13). - I am now more active. - Coordinator helped with the children (from a widow). - The coordinator helped my daughter to be more at ease socially. - She referred me to an agency (or a service). (12 like this). - She helped the community to better understand neighborhood problems - Helped me so that I can now solve my own problems. - Talked about gangs, empty houses, and stop lights. - Made me realize that my child must be taught at home before he goes out and that I must respect my child and listen to him. - Made me see the importance of participating in the school and its activities. - Helped me understand proper clothing. - Explained need for parent participation in meetings. - Explained education. - Encouraged and enlightened. - Helped with home problems (several answers like this). - Discussed neighborhood problems. - Got me into a community group. - Helped get the children studying by having me fix a time and a place for study (I have a small house). - Informed me of my children's lateness and homework (they said they had none) through a visit to the teacher as suggested by the coordinator.

	- I had conferences with my children at her suggestion. - Learned of community meetings. - Joined a community group. - Got me to come to more meetings. Explained how they might help my home problems. - Started me thinking. - Came to understand community and see that all families have problems. - Understand child better. - Helped with "problem child". - Helped understand relocation. - Good listener. - Helped get children to school on time. - Pointed out that home is only a part of a child's life. - Got me to help another family. - Held discussion groups - how to improve neighborhood, how to raise children. - Got children part-time and/or summer jobs. - Medicine aid. - Police-community relations started. - Began enrichment program. - Helped child with study habits. - Got me a job helping children. - Got me to improve my home. - Good to have her to confide in. - Started new contact with police. We had never had such a thing before.
8. What do you think of the School-Community Coordinator Program? Why?	All favorable answers. - A very important program. - The coordinator is one of us. Should have started this long ago. (many answered like this) - Helps community unity. - Benefits all in the school. - She is a friend at the school and a source of information. - All speak well of her. - She has helped parents get interested in school and community affairs. - Brings home and school closer together - "ideal". - All races are getting along better. - Visiting is good. - Need more coordinators.

	- She helps us to understand why things are happening. - Coordinator makes parents feel they are needed like teachers are. - Coordinator promotes understanding between teacher and parents. - Children seem to have more interest in everything. - All schools should have a coordinator. - The coordinator has shown that she cares about other people and their problems. - Since the coordinator is from the community, it is not like a stranger coming into the home. - There are many programs now that wouldn't be except for her. - Visiting allows close contact and immediate assistance. - Coordinator reaches many parents and helps them. - She makes parents feel the school is concerned and interested in their children. - Coordinators always have time for me and are willing to listen to my problems. - The coordinator's visit made me go to school and I changed my mind about it (school). - This (coordinator) program helps me help my kids. I didn't finish school so I need help. - Coordinator explains what the school needs and expects from parents. - I went and tried to get others to come to the meeting because she was so concerned. - The coordinator informs those who cannot get to the school. - She showed parents that children should stay in school. - She told us something about what was going on in other schools. - She discouraged children from dropping out (several answers like this). - The coordinator is particularly helpful to working mothers - contact with school. - Having the coordinator show interest led to clean-up, less vandalism, less apathy.
9. What would you like to see done to help school-community relations? How could coordinators help this?	- Want to see parents get involved (many answered like this). - Keep the program (several answered like this). - Children find the coordinator to be a good friend; they need her. - More school activities. - More night meetings so working parents can come (several answered like this). - Less taprooms. Coordinators could really talk this up. - More pride in home life. - Schools should be open at night so that working parents can let the proper authorities know about their problems (several answered like this). - Can help Home and School Association attendance by calling parents. - School and community could meet more and keep each other more informed (many answers like this). - Give the coordinator more voice in community planning.

Appendix 8-B, continued

	- Expand the program (several answered like this). - More coordinators (many answered like this). - More cooperation between parents and officials needed. - Discussion groups helpful. - Help improve the way some kids are sent (dressed) to school. - Need more after-school activities at school. - All schools, especially bussed schools, should have coordinators (several answered like this). - A television project to help spread understanding of the program would be a good idea. - Continue work on neighborhood clean-up and beauty. - More teacher involvement. - Citizenship classes for children.

SECTION 9

PROJECT 8, MASSIVE BASIC SKILLS

9-1. PROJECT DESCRIPTION

This section describes the massive basic skills program ("Massive Program to Upgrade Achievement in Basic Skills for Educationally Handicapped Pupils").

9-2. Objectives

Although this project was divided into several subprojects, these objectives were specified for the entire project:

1. To increase skill in reading,
2. To increase skill in composition,
3. To increase skill in mathematics,
4. To raise the self-image of pupils through literature, and
5. To improve the teaching of the above.

9-3. Summary of Project

Although no federal funds were spent on this project, parts of the program were initiated in several schools during the year. The following subprojects were planned and executed to the degree indicated:

Schedule pupils for more time learning basic skills. Remedial-reading periods were increased from 2 to 3, or 3 to 5, periods a week, depending on the amount previously scheduled; students were grouped by ability in these extra classes, which had not been done previously.

Modify curricula for educationally handicapped children, giving special emphasis to mathematics and English usage and composition. Curriculum committees wrote materials for this subproject during the month of August, and pilot studies were begun in September in mathematics, English usage, and composition.

Provide after-school tutoring in mathematics and language arts. The after-school tutoring subproject was transferred to a different department, and is no longer under the direction of Dr. Buell.

Hire more remedial teachers and counselors. The subproject to increase the number of remedial reading teachers is no longer under the direction of Dr. Buell or this project; the subproject to increase counseling was dropped from the project in June, 1966.

Use literature experimentally to raise pupils' self-image. The subproject to improve self-image was implemented in September, 1966 in four different schools; the program now includes 25 teachers and 1,600 children. The teachers involved in this subproject met during the month of August for planning sessions.

Use programmed instruction experimentally for remedial teaching of language arts and mathematics. Programmed instruction was initiated in September, 1966. Each school selected program materials they felt would best meet the need in their school; these materials cover subject areas including language arts, mathematics, science, and geography.

9-4. EVALUATION METHOD

It was planned that, for the subprojects of providing more time in basic school and providing tutors, the test scores from the mass testing (Section 22) would be used to evaluate this program; however, because this material was returned to FIRL from IBM in early September, and because the Board of Education was unable to supply rosters of participating students, these data were not available. The other subprojects did not begin until September, 1966. Further, Dr. Buell, the project director, felt that many subprojects that involved curriculum planning and modification could be evaluated only by putting the curriculum into use over a period of 1 to 3 years, and evaluating achievement attained by the pupils involved in these new curriculum subprojects.

However, some staff members involved in these subprojects were administered the Teacher Survey and the Title I Survey; these results are discussed in Section 23 of this report.

9-5. RESULTS

At this time, no results are available. However, because some of these subprojects are continuing this year, results will be described in next year's evaluation.

SECTION 10

PROJECT 9, EXPERIMENTAL DEMONSTRATION CENTER FOR YOUNG CHILDREN

10-1. PROJECT DESCRIPTION

10-2. Objectives

The proposed objectives of this program were as follows:

1. To provide a center for experimentation and demonstration in which educational, medical, and social workers can study an integrated program;
2. To foster the total development of the children;
3. To supplement and enrich the children's home experience; and
4. To develop a system of summarizing significant information about each child for use by regular schools and services.

10-3. Summary of Project

This project did not get underway because the facility to be leased from the University of Pennsylvania, the Illman Carter School, was not made available at the time indicated. This delay was caused by an unexpected contractural problem faced by the University. However, the facility will be available this fall, and some supplies already have been purchased for it.

The methods to be utilized in accomplishing the proposed objectives were to set up a center with provision for specialized services, then invite use of the center by appropriate services and solicit suggestions for meeting their needs.

The use of the center was to be scheduled to assure balance of services. Activities would be provided to direct mental, physical, social, and emotional development of the children.

Parents would be interviewed so that knowledge of home and family could be pooled with other agencies or services, and homes would be visited and discussed with the children.

Questionnaires, checklists, and other measuring devices would be devised and revised as appropriate for gathering and preserving information; these information forms would be forwarded to receiving schools.

10-4. EVALUATION METHOD

Because no program could be conducted, it could not be evaluated. When the program begins, the following procedures and instruments are to be used to measure the degree to which the planned methods accomplished the proposed objectives:

1. Log the use of the center by medical and social services (objective 1);
2. Submit questionnaires to the medical and social services using the center (objectives 2 and 3); and
3. Help project personnel develop checklists for measuring developmental stages of children and check them periodically to ascertain growth; and help develop questionnaires and other instruments to describe home background and environment (objective 4). Use information about students obtained from homes for follow-up in evaluating student.

10-5. RECOMMENDATIONS

When the center is opened, formulate a plan with specific hypotheses to be tested regarding the relationships among the child's home, school, and demonstration center environments.

SECTION 11

PROJECT 10, ELEMENTARY ART PROGRAM

11-1. PROJECT DESCRIPTION

This section describes the Elementary Art Program ("Innovative Program Providing Art Teachers for the Education of the Disadvantaged Child on the Elementary Level").

11-2. Objectives

The stated objectives of the Elementary Art Program were as follows:

1. To offer specialized art teaching,
2. To stimulate creativity,
3. To provide art-appreciation experiences,
4. To give opportunities for group work and mural painting and other school projects,
5. To recognize talent,
6. To discourage vandalism and increase respect for materials and tools, and
7. To improve physical environment.

11-3. Summary of Project

To accomplish objective 1, 151 specialist art teachers and three artists-in-residence were to have been provided for 157 elementary schools; the other objectives were to have depended on supplying these teachers. As of September 1, only 90 art teachers had been hired; budgeting restrictions preclude hiring the rest for at least a year.

Relative to the objective of recognizing talent, the Title I program also contributed to extending and developing several well-established programs in Philadelphia. About 1600 children recommended by their schools as having a talent for art are attending Saturday-morning art classes at 11 centers in the city. With a faculty now numbering over 50, the program has been in operation for nearly 40 years. In another program, four to ten children selected by their teachers are televised as they do artwork; this program is 18 years old.

The objective of improving the physical environment has been traditionally sought by Philadelphia art teachers in the displays they have produced and inspired, and in neighborhood cleanups they have initiated. And the awareness of city planners of the importance of community improvement is demonstrated by the list of participants in the 1967 Arts Festival, which is associated with the urban-renewal program: the Art Museum, City Planning Commission, and the Art Department of the Board of Education. The 90 teachers associated with this Title I program, therefore, play a vital part in improving the city's appearance.

Also contributing to the last objective are two summer art centers operated in Philadelphia, one at Germantown High (6 weeks), the other at the Fleisher Art Memorial (2 months). About 140 children attend these classes on a voluntary basis.

II-4. EVALUATION METHOD

Because the Title I program involved 90 schools, a sampling procedure was employed to measure the degree to which the stated program objectives had been met. Three measures were used: judgments by art experts of pupil creativeness, a questionnaire completed by students which concerned their attitudes toward art, and a checklist of art subjects or activities teachers could teach as well as those which they were capable of teaching but did not.

11-5. Pupil Art-Creativeness Judgments

This measure was designed to show the extent to which children with art teachers were more artistically creative than those without art teachers.

Six schools were selected. For each of grades 4 through 6, average sections from two schools in the same district were paired; one class in each pair had a special art teacher, the other had none. Table 11-1 shows the school and class size for each grade.

Table 11-1. School and Class Size for Sample Classes Used in Pupil Art-Creativeness Judgments

Grade	Art		Non-Art	
	School	Class Size (Pupils)	School	Class Size (Pupils)
4	Fell	30	Taggart	23
5	Arthur	27	McDaniel	29
6	Lea	35	Patterson	29

Teachers collected the output of an assigned project from their pupils, but were not told that the artwork would be used for this study. Fourth-grade outputs were collages of houses and buildings; fifth-grade outputs were soft-pencil drawings of favorite scenes; and sixth-grade outputs were watercolor renditions of outdoor scenes.

Papers were coded and judged independently and "blind" by two different judges for each grade. Judges, all affiliated with local art colleges, were selected by Mr. Walter Lubar of the Division of Art Education. Each judge was told only the appropriate grade level and was asked to rank the papers from most creative to least creative. Rank-order correlations were then computed for each pair of judges (heading 11-9).

11-6. Student Art-Attitude Questionnaire

This questionnaire, given to the same six classes participating in the art-creativeness judgments, contained 20 items; 10 items were questions of fact, and 10 concerned attitudes toward art both in and out of school.

Questions concerning how much they like art and how often they would like to have art class were directed toward measuring the effects of art-appreciation experiences (objective 3). Questions concerning artwork done outside school indicate to what extent the physical environment was improved (objective 7).

Data from this questionnaire were reduced by frequency counts and chi-square computation (heading 11-10).

11-7. Teacher Checklist

The teacher checklist was completed by 17 art teachers, 13 fourth-grade teachers, 12 fifth-grade teachers, and 9 sixth-grade teachers. The checklist contained items selected as art experiences that every child should have in elementary school. The teachers indicated which of the 96 items they *could* teach (given materials, supplies, and time), and which they *had* taught during the past year.

The checklist asked specifically about art-appreciation experiences (objective 3), group work (objective 4), and use of work to improve physical environment, such as shows and displays (objective 7). Also, the more experiences and the greater variety of experiences a child has, the more he should be stimulated to creativity (objective 2). Similarly, more experiences for the child to create means more chances for talent he displays to be recognized (objective 5), particularly when the observer and teacher are experts in the field. Finally, an expert is one who has profound respect for his medium and who can demonstrate the power and flexibility of the tools of his medium, when they are handled with care and skill. This respect for tools and property (objective 6) is more likely to be conveyed by such a person than by a grade teacher, particularly if he spends some time purely on manipulation of tools.

The data from the teacher checklist were tabulated separately for art teachers and fourth- through sixth-grade teachers. Chi-square tables were developed to test the significance of the difference between the art teachers and the elementary teachers for each item.

11-8. RESULTS

11-9. Pupil Art-Creativeness Judgments

Differences between the rankings of the art classes were evaluated by a median test; this test utilizes probabilities based on chi squares.* The significance levels of class differences, which were based on the test, are shown in Table 11-2. For the fourth and fifth grades, the sections with art teachers are judged significantly better than those without. For the sixth grade, the results are not statistically significant: one judge rated the class having an art teacher more creative, the other rated the non-art group more creative.

Table 11-2. Significance Levels of Class Differences of Art Creativeness

Grade	Judge	Significance Level†
4	1	< 0.001
	2	< 0.001
5	3	< 0.001
	4	< 0.001
6	5	Not significant
	6	Not significant

†One-tailed test.

The Spearman rank correlations (r_s) between judges were 0.49 for sixth grade, 0.61 for fourth grade, and 0.81 for fifth grade. These correlations are all significant below the 0.001 level, using a two-tailed test ($t = 5.92$ for fourth grade, 9.90 for fifth grade, and 4.32 for sixth grade).

Scatter diagrams of the rank-orderings are shown in Figures 11-1 through 11-3 for grades 4 through 6, respectively.

11-10. Student Art-Attitude Questionnaire

The results of the student questionnaire are summarized in Table 11-3. In this table, data for the opinion items are presented separately, while data for the factual items are combined. In some instances,

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*For a description of median-test techniques, see Siegel, Sidney, Nonparametric Statistics for the Behavioral Sciences, New York, N.Y.: McGraw-Hill, 1956.

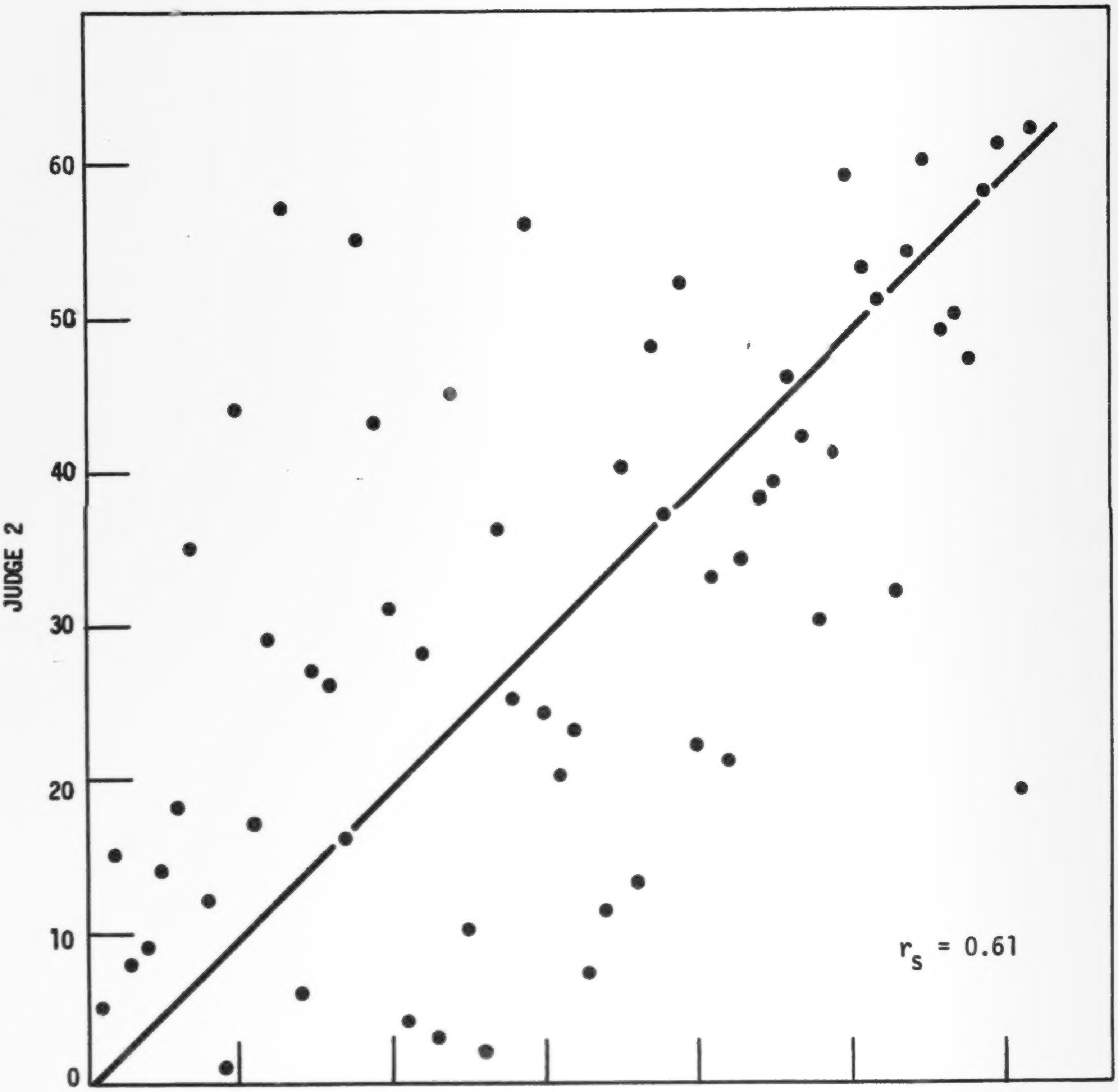

Figure 11-1. Rank-Orderings by Two Judges of Cut-Paper Work by Fourth-Graders

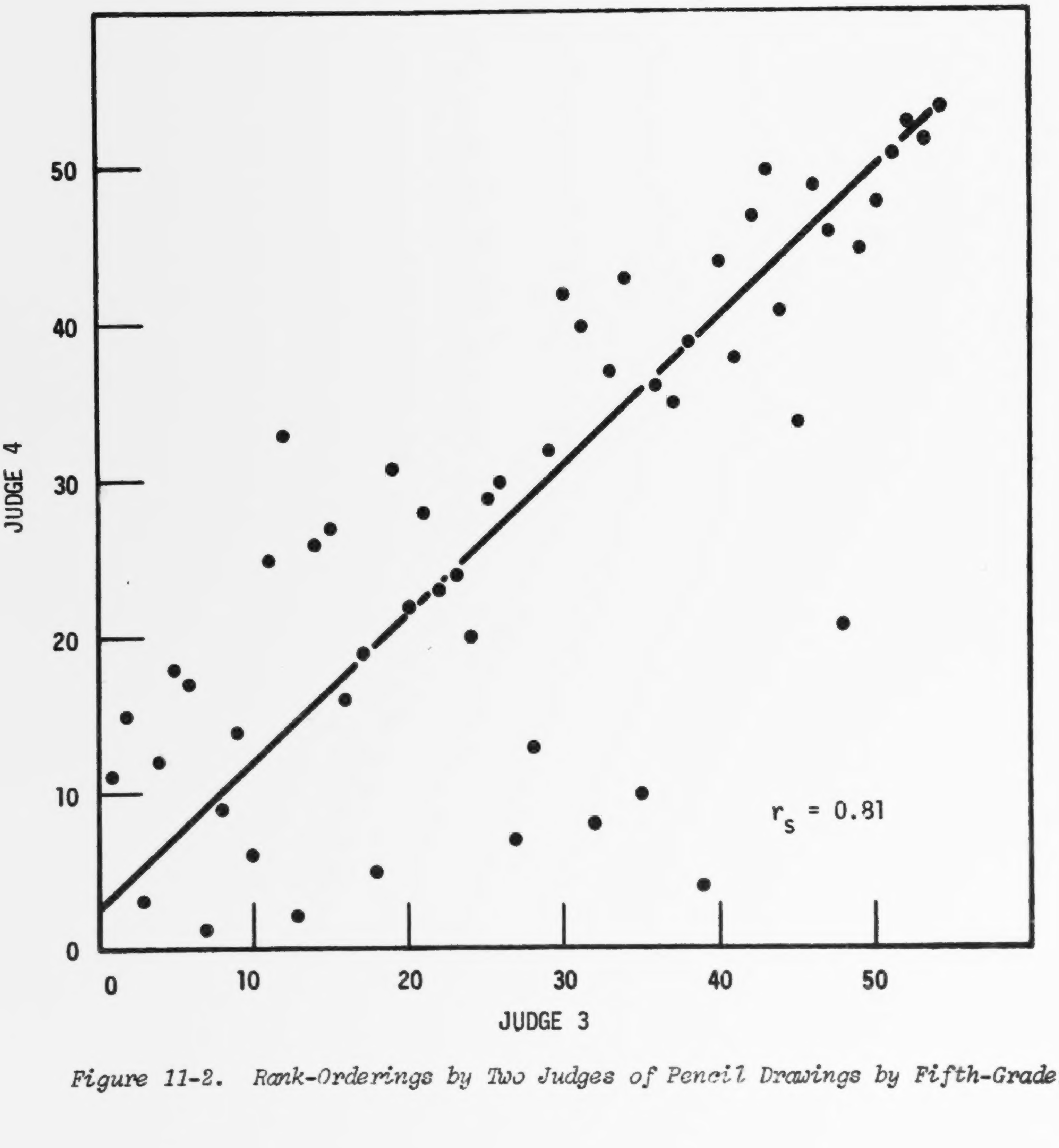

Figure 11-2. Rank-Orderings by Two Judges of Pencil Drawings by Fifth-Graders

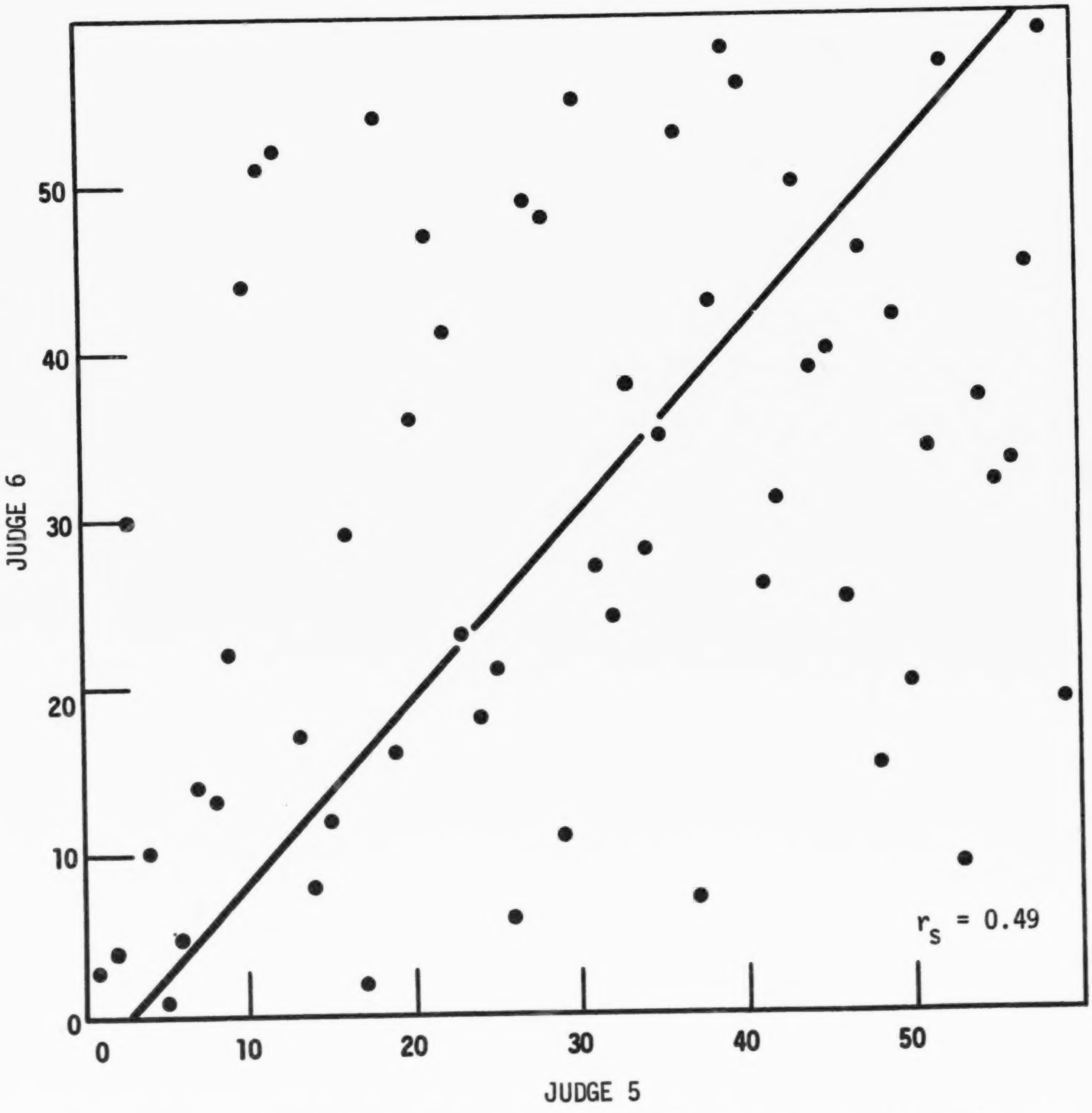

Figure 11-3. Rank-Orderings by Two Judges of Watercolor Work by Sixth-Graders

Table 11-3. Chi-Square Values, Degrees of Freedom, and Significance Levels for Fourth- through Sixth-Grade Classes, With and Without Art Teachers

Type of Item	Number	4th Grade			5th Grade			6th Grade			Combined Grades		
		χ^2	df	p	χ^2	df	p	χ^2	df	p	χ^2	df	p
Fact	1-10	5.67	1	$<.02$	0.12	1	NS	28.40	1	$<.001$	19.21	1	$<.001$
Opinion	1	1.44	4	NS	3.57	3	NS	3.33	2	NS	3.77	2	NS
	2	7.10	2	$<.05$	4.73	3	NS	3.58	2	NS	13.10	4	NS
	3	2.71	4	NS	6.08	2	$<.05$	2.72	4	NS	1.05	4	NS
	4	13.24	2	$<.01$	13.74	1	$<.001$	3.44	2	NS	6.37	2	$<.05$
	5	5.33	4	NS	6.00	2	.05	2.49	2	NS	3.21	2	NS
	6	5.87	4	NS	4.02	4	NS	7.19	1	$<.01$	16.31	3	$<.001$
	7	3.56	2	NS	1.37	2	NS	6.58	2	$<.05$	3.05	2	NS
	8	2.54	4	NS	5.96	4	NS	5.22	4	NS	2.93	3	NS
	9	1.66	2	NS	0.78	3	NS	2.09	3	NS	1.59	3	NS
	10	3.93	1	$<.05$	1.12	1	NS	2.61	1	NS	8.00	1	$<.01$

answers were combined to obtain an acceptable frequency in each cell. For example, "not much" and "not at all" were combined in the first of the opinion questions ("Do you like art?").

Where significant differences arose, results *always* favored the schools with art teachers. In no case did the classes with no art teacher show a more positive attitude toward art than did those with an art teacher. The percentages given in Table 11-4 show that over all three grades, children in schools with art teachers liked art more, were more likely to think of art as something to do at home as well as in school, said they would be more disappointed if their next art class was cancelled, made more paintings at home, had more crayons at home, liked art more than they did last year, and were more likely to paint as a leisure activity.

11-11. Art-Teacher Checklist

Table 11-5 summarizes the results of the checklists completed by 51 art and fourth- through sixth-grade teachers. The table shows clearly that art teachers are not only prepared to teach a more diverse set of art subjects, but that they do teach a wider range of activities than the grade teachers.

11-12. CONCLUSIONS

From the results, the following conclusions can be drawn with respect to the specific objectives:

1. Specialized art teaching was offered for at least part of the past year in about 90 schools which had had no regular art teachers during the previous year.
2. As defined here, "creativeness" was stimulated more in schools with art teachers than in schools without art teachers.
3. Students in schools with art teachers had more art-appreciation experiences than students in schools without art teachers.
4. Students in schools with art teachers were given more opportunities for group work in art than students in schools without art teachers.
5. Art programs for children whose talent was recognized were continued; because the schools are mostly responsible for recognition of this talent, the addition of expert judges in the form of art teachers probably made such recognition more valid.
6. Because children with art teachers do more artwork out of school, because art teachers have concern for the appearance of the community, and because art teachers staged shows of childrens' work, the school and community environment have been improved by art teachers.

Table 11-4. Percentages of Students Holding Various Opinions Concerning Art Attitudes

Question	Percent	
	Art	Non-Art
1. Do you like art		
a. A lot?	78	63
b. A little?	18	32
c. Not much?	4	3
d. Not at all?	0	2
2. In art class are you		
a. Much more interested than in other classes?	52	33
b. A little more interested than in other classes?	14	10
c. Interested the same as in other classes?	24	28
d. A little less interested than in other classes?	5	10
e. Much less interested than in other classes?	5	20
3. How often would you like to have art?		
a. Never.	0	2
b. Once every 2 weeks.	2	1
c. Once a week.	16	20
d. Three times a week.	15	15
e. Every day.	67	62
4. How do you think of art? Is art		
a. A subject taught at school?	21	20
b. Something to do not only at school but also at home?	76	66
c. Something for others to do?	2	10
d. A word you do not understand?	0	2
e. Something that most of us do not enjoy?	1	2
5. If your next art class was cancelled, would you		
a. Be very disappointed?	76	63
b. Be a little disappointed?	14	24
c. Not care?	5	4
d. Be a little bit glad?	3	2
e. Be very glad?	2	7

Table 11-4. Percentages of Students Holding Various Opinions Concerning Art Attitudes (cont)

Question	Percent	
	Art	Non-Art
6. How many paintings have you made out of school this year?		
a. None	13	19
b. One	2	14
c. Two or three	13	22
d. Four or five	10	5
e. More than five	62	40
7. Do you have crayons at home?		
a. None	13	13
b. A few	22	36
c. Many	65	51
8. Do you like art more or less than you did last year?		
a. Much more	64	52
b. A little more	12	13
c. About the same	19	25
d. A little less	5	4
e. Much less	0	6
9. Have you done art work at home or anywhere else except at school?		
a. A lot	49	49
b. Some	33	31
c. A little	14	11
d. None	4	9
10. Which would you rather do?		
a. For boys - play baseball For girls - jump rope	29	48
b. Go to a movie	20	27
c. Paint a picture	30	11
d. Watch television	20	11
e. Write a story	1	3

Table 11-5. Chi-Squares and Significance Levels for Differences in Ability of Fourth- through Sixth-Grade and Elementary Teachers to Teach 11 Areas of Art, and Amount Taught in the Past Year in the Same 11 Areas

Unless otherwise noted, differences were in favor of the art teacher.

Area	4th Grade				5th Grade				6th Grade			
	Can Do		Did		Can Do		Did		Can Do		Did	
	χ^2*	p	χ^2*	p	χ^2*	p	χ^2*	p	χ^2**	p	χ^2*	p
Picture-making	73.6	<.001	115.1	< .001	121.6	< .001	132.7	< .001	93.2	< .001	145.7	< .001
Print processes	115.4	<.001	30.1	< .001	89.9	< .001	14.7	< .001	61.2	< .001	13.4	< .001
Textiles	37.0	<.001	14.2	< .001	80.5	< .001	17.2	< .001	93.4	< .001	16.3	< .001
Three-dimensional construction	30.7	<.001	1.5	NS	71.0	< .001	1.3	NS	88.5	< .001	0.5	NS
Theatre arts and puppetry	4.7	<.05	0.4	NS	17.4	< .001	4.7	< .05	14.9	< .001	0.2	NS
Paper work	59.7	<.001	3.8	NS	55.5	< .001	1.7	NS ‡	107.7	< .001	1.6	NS
Poster work	32.2	<.001	1.7	NS	63.5	< .001	0.1	NS	50.2	< .001	0.6	NS
Art experiences †	43.3	<.001	24.0	< .001	45.7	< .001	39.3	< .001	57.8	< .001	53.2	< .001
Manipulation	44.5	<.001	22.5	< .001	62.2	< .001	12.7	< .001	64.9	< .001	10.2	< .01
Personal growth	9.8	<.01	18.5	< .001	29.2	< .001	19.9	< .001	28.8	< .001	22.1	< .001
Group work	19.1	<.001	1.1	NS ‡	12.1	< .001	0.0	NS	18.2	< .001	0.04	NS

*Always one degree of freedom.

†Includes field and museum trips, vocabulary improvement, and art appreciation.

‡Regular grade teacher did more.

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11-13. Strengths of Project

Some strengths of the project are that school and community have become cleaner and more beautiful. Children have been exposed to art and the culture which surrounds it. Talent has been recognized and creativity stimulated and nurtured. Cooperative work has been encouraged and vandalism discouraged. Most importantly, children's attitudes toward art have been improved and their participation in art activities increased.

The program administrators are energetic and have foresight; they have been recognizing talent through the Saturday workshops for 40 years, and through television for 18 years. They have contributed to community development and cleanup, and urban renewal. They and their teachers naturally encourage respect for materials and tools by their actions. They have operated workshops for their teachers and printed handbooks on teaching art for all teachers.

11-14. Weaknesses of Project

There have been occasional failures of communication and/or organization on this project. This has resulted from the speed with which the project was implemented and probably will occur only rarely in the future.

The lack of a statistically significant difference between the two fifth-grade classes on questions about art facts may be caused by the inability to match these schools on the basis of cultural background.

11-15. RECOMMENDATIONS

The following recommendations for the Elementary Art Program are based on the preceding conclusions:

1. Next year's evaluation should be based on the measures used this year.
2. More schools should be involved in the projects.
3. Schools without art teachers and schools with art teachers should be carefully matched not only for socio-economic status (and sex and intelligence between classes), but for "cultural" background and for teacher experience.
4. Next year a direct measure of decrease of vandalism (if that objective continues) should be included. A questionnaire might be included with the teacher checklist to obtain specific evidence concerning improvement of environment, art-appreciation experiences, and group work.

SECTION 12

PROJECT 11, MUSIC PROGRAM

12-1. PROJECT DESCRIPTION

12-2. Objectives

These were the original objectives of the Music Program ("Innovative Program Providing for the Disadvantaged Child at the Elementary Level Music Specialist Teachers and the Instructional Materials Necessary to Support Their Activities"):

1. To raise aesthetic literacy to music.
2. To provide developmental experience in creative expression through a wide range of creative musical activities. To enhance verbal expression through creative response to music.
3. To give opportunities for group activities and to attend a broad spectrum of cultural events in and around Philadelphia.
4. To recognize talent.
5. To enhance the self-image.
6. To provide individualized instruction.
7. To help parents to support and encourage musical development of children.
8. To demonstrate that success in music will lead to better school work in other areas.
9. To help children learn to read music.

It has been recognized by the group responsible for conducting the project that these objectives, as written, are ambiguous and unclear. They have suggested a restatement of the objectives; this restatement and a revision suggested by The Franklin Institute Research Laboratories staff, are presented under heading 12-10.

12-3. Summary of Project

This project, like most of the Title I Projects, is new and was conducted for only about five months of the past school year. For this reason, and because the program is innovative, its progress has been uneven.

Objective 1, "aesthetic literacy in music", is an unclear concept for measurement purposes, and was interpreted by the group conducting the project to mean interest and experience in music. The music teachers used five techniques to accomplish this objective:

1. Singing,
2. Drumming,
3. Playing pre-orchestral instruments (melody flute, bells, and autoharp),
4. Listening (records and live performances), and
5. Creating (instrumental tunes and songs).

Objective 2 also was phrased in nonoperational terms, and was interpreted by the project group to mean that the music teachers should expose children to creative experiences and, in particular, that the creative-expression technique— use of physical movement by children to express what they hear in music— should be used. No organized part of the program was specifically directed toward meeting this objective.

Group experiences (objective 3) are naturally utilized by music teachers whenever choral or orchestral emsembles are conducted. Specialist music teachers added to the elementary schools often organize such groups. In addition, the Music Department has been providing a "Young Audiences" program in which professional musicians visit the schools. This program, however, is financially independent of Title I, although Title I children participate in it. Title I funds were not used to promote cultural events; however, the Music Department stresses cultural events as part of its regular program.

Recognition of talent (objective 4) has been a deliberate goal of the Department for some years in Saturday-morning and Tuesday-evening music programs. Inasmuch as recognition and discovery of talent is felt by the Music Department to be one of its most important tasks; teachers are constantly watching for talented youngsters. School choirs and orchestras, composed of youngsters chosen by music teachers, have been organized by music teachers in poverty schools, often for the first time in a school.

Objective 5, enhancing youngsters' self-images through music, is still hypothetical, and no organized part of the program was directed specifically toward its attainment.

Providing individualized instruction (objective 6) is associated with recognizing talent (objective 4). Time has been specifically alloted in some schools for teachers to provide individual instruction.

Toward meeting objective 7, parents have been approached on every extra program. When children are thought to have talent, their parents are asked to encourage them to join in the appropriate program.

No organized part of the program was directed specifically toward the objective of generalizing success in music to other areas (objective 8). It was expected that attainment of this objective would be an additional benefit of a well-run program.

Music teachers are naturally concerned with reading music (objective 9). Elementary teachers start by teaching fundamentals (melody, harmony, and rhythm). Later, simple songs may be sight-read. No organized part of the program could be directed toward this objective because the children's level of musical development had not yet reached the reading stage.

Title I funds have been spent in a variety of ways for this project, as a result of which many new programs will be started this fall in elementary schools. Items and services purchased include the following:

Staff— 34 elementary-school teachers,

Texts,

Drumsticks and instruction books,

Orchestral instruments,

Piano or organ,

Tape recorder or record player,

Film strips and recordings *(Adventures in Music)*,

Flannel boards with musical notation,

Sheet music, and

Pointer films to teach organ playing.

One program, started by Dr. Wersen, head of the Music Program, uses the the pointer films to instruct children in playing the organ.

A classroom program for academic music study and instrumental training also was provided this summer.

12-4. EVALUATION METHOD

All the stated program objectives could not be evaluated because time was insufficient; and, because this year was the program's first, and no measures were taken before the program began, the success of meeting some objectives could not be evaluated.

A sample of 10,000 students, which was originally proposed,was not possible. The sample used was 828 students. In addition, 26 grade teachers were surveyed.

Two evaluation instruments were designed and administered: a teacher activity checklist and a student questionnaire. In addition, an informal survey of musically talented pupils was conducted by Dr. Aliteris and Mr. Ewart of the Music Department.

A survey of pupils participating in music experiences, which was originally proposed, could not be conducted because time was insufficient. A parental questionnaire also could not be used because its measurement would have been of questionable value and because time was inadequate.

As indicated above, pupils' ability to read music could not be evaluated because their musical development and training had not reached that stage. The Music Department of the Board of Education advised the evaluators that a music program which would reach the music-reading stage could not be developed in the short time available.

A pre-post relationship of music study to verbal expression and to better schoolwork was impossible because the program was operating before the evaluation could be initiated.

12-5. Teacher-Activity Checklist

The teacher-activity checklist, which was specifically designed to measure the extent to which objectives 2, 3, and 6 had been met, consisted of 27 items. Ten fifth-grade teachers from three nonpoverty schools without music teachers, six from three poverty schools without music teachers, and ten from three poverty schools with music teachers were surveyed. Each teacher indicated, in half-hour intervals, how much time he spent per week on each item. None of the teachers indicated that he spent more than 2-1/2 hours per week on any one item. In the schools with music teachers, data from the item "monitoring class while special teacher gives music instructions" were replaced by a survey of the time the music teacher spent teaching those classes.

Of the 27 items in the checklist, 10 were musical in nature; only those items were used in the evaluation. Teachers were not told that the checklist was to be used to evaluate the music program. The cover letter included with the checklist said, "The purpose of this checklist is to aid in the evaluation of projects conducted under Title I of the Elementary and Secondary Education Act." The 17 nonmusic items masked the intent of the checklist to encourage more accurate reporting.

12-6. Pupil Questionnaire

The pupil questionnaire consisted of 92 pairs of activities. Each student was to indicate which activity of each pair he would like to do more. Of these pairs, 64 matched one of eight musical activities with one of eight nonmusical activities. The other 28 items matched nonmusical items with other nonmusical items; these 28 were used only to assure that the eight nonmusical items covered a continuum of activities ranging from desirable to nondesirable, and were not otherwise relevant to this evaluation. The 26 fifth-grade classes used were the classes of the teachers who completed the checklist. Table 12-1 lists the items used.

Table 12-1. Activities Paired on Pupils' Questionnaire for Music Program

Musical Activities	Nonmusical Activities
Playing a musical instrument	Watching television
Singing	Reading a book
Taking music lessons	Taking out the trash
Listening to records	Going to English class
Playing in a band	Going to an art museum
Seeing a musical show	Seeing a play
Going to music class	Going to the grocery store
Hearing a concert	Doing a puzzle

The 26 teachers were rank-ordered by time spent on musical activities. The classes of these 26 teachers were rank-ordered according to the average number of musical items preferred out of the 64 presented in the pupil's questionnaire. A rank-order correlation then was computed.

12-7. RESULTS

From the Teachers' Checklists, it was found that classroom teachers and music teachers (taken together) in poverty schools spend an average of 3.80 hours per week on the musical activities listed. Their counterparts in poverty schools with no music teachers average 3.16 hours per week per class. Teachers in nonpoverty schools without music teachers average 2.55 hours per week per class; these teachers may spend less time on music subjects because they are more concerned with academic activities, such as mathematics and English, which are generally considered to be more useful for their pupils' futures. None of these differences is significant at the 0.05 level using the Mann-Whitney U-Test, but children with music teachers tend to be given more music instruction.

The pupils' questionnaires were used to rank the activities according to the frequency with which they were chosen; Table 12-2 shows the rankings for the three groups. These rankings are not significantly different using the Mann-Whitney U-Test. However, the rankings of the poverty schools with music teachers are more like those of the nonpoverty schools than those of the poverty schools without music teachers. If one believes nonpoverty schools to have children of more cultured backgrounds, then this similarity may indicate a tendency in the direction of culture when music teachers are added. However, because this is not a strong trend, it must be followed closely to determine whether it continues.

Table 12-2. *Rankings of Activities by Pupils in Music Program*

Rank	Poverty Schools		Nonpoverty Schools (without music teacher)
	With Music Teacher	Without Music Teacher	
1	Watching television	Watching television	Watching television
2	Listening to records	Listening to records	Taking music lessons
3	Reading a book	Going to an art museum	Going to music class
4	Going to an art museum	Playing a musical instrument	Going to an art museum
5	Seeing a play	Seeing a play	Singing
6	Seeing a musical show	Reading a book	Playing a musical instrument
7	Playing a musical instrument	Going to a musical show	Listening to records
8	Singing	Going to music class	Reading a book
9	Taking music lessons	Taking music lessons	Going to a musical show
10	Going to music class	Singing	Playing in a band
11	Playing in a band	Playing in a band	Seeing a play
12	Doing a puzzle	Doing a puzzle	Going to English class
13	Hearing a concert	Going to the grocery store	Hearing a concert
14	Going to the grocery store	Hearing a concert	Doing a puzzle
15	Going to English class	Going to English class	Going to the grocery store
16	Taking out the trash	Taking out the trash	Taking out the trash

The rank-order correlation between the amount of time spent on musical activities in a given class and how often the class chooses musical activities over nonmusical activities is 0.44; this is statistically significant at less than the 0.05 level. Thus, the more time a grade teacher spends on music, the more likely her pupils are to choose musical activities over nonmusical activities.

12-8. DISCUSSION

Because the program is less than a year old, immediate results cannot be expected from it; trends, however, can be discerned. Our measurement results show a tendency (which is not statistically significant) for more time to be spent on music in schools with specialist music teachers than in schools without them. Qualitatively, the amount of time spent on music correlates positively with preference for musical activities; this correlation is statistically significant.

12-9. CONCLUSIONS

Much of this year's work on the program has been directed toward acquiring equipment and facilities to expand the child's opportunities in music and musical expression; availability and use of these acquisitions have engendered more favorable attitudes toward music by the children.

Musical talent cannot be detected and developed in the short time this program has been in operation. However, directors of the Saturday-morning and Tuesday-evening music programs have reported that, since Title I provided funds for teachers, and since those teachers started selecting the talented pupils, more talented children are participating in the programs.

12-10. RECOMMENDATIONS

Because the evaluation indicates that this project has developed favorable pupil attitudes toward music, the project should be continued. Certain changes, however, are recommended:

1. State project title and objectives in terms of measurable outcomes (specific suggestions are listed in the following paragraphs);
2. Plan for longer-term evaluation than that scheduled for this year;
3. Keep records of the number of children starting and stopping music lessons, attending musical events— both school-sponsored and extracurricular, obtaining musical instruments, or otherwise participating in musical activities. Such records must be planned in advance, and teachers carefully instructed in their use.

A new project title, suggested by the evaluators and approved by the program administrators, is "Innovative Program for the Disadvantaged Elementary School Child, Providing Special Music Teachers and Instructional Materials Necessary to Support Their Activities."

The program objectives were restated by the evaluators in more easily measured terms as follows:

1. To develop and improve
    a. Musical literacy,
    b. Musical Taste,
    c. Musical performing skill,
    d. Verbal expression, and
    e. Overall academic performance;
2. To provide musical opportunities —
    a. Group musical-performance activities,
    b. Attendance at musical cultural events,
    c. Individualized music instruction, and
    d. Creative musical expression;

3. To recognize and encourage musical talent;
4. To enhance the self-image; and
5. To help parents support and encourage musical development of children.

The objectives as restated by the Music Department of the Philadelphia Public Schools, from which the evaluators' restated objectives were drawn, are as follows:

1. To develop musical literacy in the child.
2. To help the child develop higher standards of musical taste.
3. To provide experience in creative musical expression.
4. To discover to what degree the child's verbal expression may be improved through creative musical expression.
5. To provide opportunities for group musical activities.
6. To provide opportunities for attendance of cultural events in the Philadelphia area.
7. To recognize and encourage talent.
8. To enhance the self-image.
9. To provide individualized instruction in music.
10. To help parents support and encourage the musical development of children.
11. To demonstrate that the child's success in music will lead to better school work in other areas.

SECTION 13

PROJECT 12, TEACHER AIDES

Due to unexpected difficulties, data reduction for this project has not yet been completed.

SECTION 14

PROJECT 13, FRENCH AND SPANISH PROGRAM

14-1. PROJECT DESCRIPTION

14.2. Objectives

The stated primary objectives of the French and Spanish program were as follows:

1. To provide continuous, sequential audio-lingual curriculum in French and Spanish for children from low-income families who normally do not identify with foreign language study and
    a. To discover linguistic ability.
    b. To provide culturally enriching experience of foreign language study.
    c. To begin the learning of foreign language at early period - greater receptivity to mimicry response and repetition method.
    d. To lengthen the sequence of foreign language study required to develop mastery in understanding, speaking, writing, and reading.
    e. To develop a linguistic awareness and thereby increase ability to verbalize in native tongue.
    f. To develop appreciation of other cultures.
    g. To provide experimental opportunities.
    h. To provide stimulus for more varied aspirations and goals.
    i. To enhance self-image.
    j. To extend aspirations of parents of participants.
2. To study relationships between I.Q., verbal ability in native tongue, and competence in second language.

14.3. Summary of Project

The methods planned for use in accomplishing the objectives are those suggested in the original proposal:

1. Audio-lingual activities in seventh grade.

2. Commercially prepared audio-lingual visual course including tapes, charts, and films.
3. Training of teachers to use materials and equipment to develop other necessary materials.

To implement method 2, two films were chosen: *Voix et Images de France*, (Chilton Publishing Company) and *La Familia Fernandez*, (Encyclopedia Britannica Films, Inc.). In addition to motivating children and aiding teaching, these films were chosen because they dealt with multi-ethnic aspects of daily-life situations comparable to those of the students; this related directly to objectives 1b and 1f.

Because the audio-lingual methods required to meet the program objectives were unfamiliar to many teachers, the first need was to train teachers in these techniques. Six-hour teacher-training sessions were held on Saturdays in June, and daily in August. In the August sessions, 36 teachers were instructed under workshop conditions. These teachers will instruct about 3800 pupils in September 1966 in a continuous program as specified in objective 1.

14-4. EVALUATION METHOD

Because only teachers were instructed, the degree to which the objectives which dealt solely with the children had been met could not be evaluated. Instead, measuring methods and instruments are suggested for each objective (Table 14-1). Selection of these instruments was based in part on the specific plans to implement the pupil-teaching part of the program as presented to the evaluating team by Mrs. Eleanor Sandstrom of the Board of Education.

In addition to the hypothesis of objective 2, the hypothesis that disadvantaged children's use of English is substandard primarily because they are exposed mostly to incorrect usage of English should be examined. If this hypothesis should prove to be true, the children should learn to speak French or Spanish better than English, because they will not have been exposed to the incorrect responses.

The Title I survey was administered to teachers in this project.

14-5. RESULTS

Because no tests specifically directed toward meeting the objectives of this project were administered, no results can be presented. The results of the Title I Survey are presented in Section 2.

14-6. CONCLUSIONS AND RECOMMENDATIONS

Except for objective 1c, the stated objectives of this program can be measured adequately with the existing or easily designed instruments and the techniques described in Table 14-1. However, to ensure the validity of these techniques, the pre-measures suggested in the table should be taken *as soon as possible*.

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Table 14-1. Instruments and Techniques for Measuring Effectiveness of Title I French and Spanish Program

Proposed Objective	Suggested Evaluation Instrument or Technique
1a	A review of currently available tests reveals that none is appropriate for measuring this objective directly. The following indirect measures are suggested: 1. Pre- and post-tests of auditory discrimination ability (Mental Measurements Yearbook Test No. 6:940). 2. Pre-test, Seashore test of musical aptitude, as a possible predictor of success.
1b	Frequency count
1c 1d	Evaluation of these objectives will be discussed with project directors; intent of objectives needs clarifying.
1e	Recorded pre-test of small samples of students' speech in native language; recorded post-test of speech samples in both native and foreign languages. May be correlated with pre-test of basic English skills given to present 6th-grade pupils as part of mass-testing program (section 22 of this report).
1f	Pre- and post- social distance scale.
1g	Frequency count
1h 1i	Academic aspirations questionnaire (same type as that used for project 15).
1j	Same as 1h and 1i, except designed for parents; control group should be used for validation.
2	Raven's progressive matrices I.Q. pre-test, combined with tests for objective 1e.

SECTION 15

PROJECT 14, INSTRUCTIONAL MATERIALS CENTER PROJECT

15-1. PROJECT DESCRIPTION

15-2. Objectives

The original objectives of the Instructional Materials Center project ("Establish, Organize and Maintain Instructional Materials Centers in Elementary and Secondary Schools") were as follows:

1. To provide wide range of materials;
2. To provide resource materials for teachers;
3. To provide more individual attention;
4. To provide materials and guidance in listening, viewing, and reading for the underprivileged child;
5. To provide study and reading centers for children who do not have suitable and attractive facilities at home;
6. To provide instruction in the use of books and other materials;
7. To develop good study skills and habits; and
8. To provide enrichment materials for all areas of curriculum.

15-3. Summary of Project

Achievement of objectives 3 through 7 depended on hiring a large number of professional librarians. Tests were given last year, but because many of those who qualified for the available positions were already working in education, mostly as teachers, hiring was postponed until summer. Funds had been allotted for 116 librarians; by summertime however, the allotted funds had been frozen and professional librarians could not be hired. Instead, 166 library assistants and five supervisors were hired. The former are clerical workers who maintain the 166 elementary- and secondary-school libraries, but who do not perform the professional duties required by objectives 3 through 7. The library assistants were trained on-the-job by the supervisory staff of the Philadelphia Public School Libraries.

Several steps were taken toward achieving objectives 1, 2, 4, and 8. Each library was provided with a basic collection of 900 to 1100 books (depending on what was already available); an audio-visual package, including a 16-mm sound film projector, filmstrip projector, dry photocopier, tape recorder, tapes, filmstrips, and other materials; and supplies such as paste, file cards, daters, and lettering ink. In addition, basic library furniture and shelving have been ordered where needed. Title I funds were not available for construction; therefore, in many cases, funds were provided by the School District of Philadelphia to build libraries or to expand old ones.

15-4. EVALUATION METHOD

The number of centers, and their staffing, materials, and usage were surveyed.

Neither of two planned questionnaires, one for 500 teachers, and one for 5000 pupils, could be administered because the centers were understaffed and in the formative stage.

15-5. RESULTS

As a result of the survey, it was determined that 166 centers are now operating, staffed with 166 library assistants. The materials provided by Title I funds to these centers are described under heading 15-3.

The survey indicated that the elementary-school libraries are not being used as effectively as the secondary-school libraries.

15-6. DISCUSSION

Title I funds have been used to buy equipment and to provide people to care for it. However, because funds were frozen and professional librarians could not be hired, the effectiveness of the program, and therefore the effectiveness of the evaluation, were seriously hampered.

The inefficient use of library facilities in the elementary schools has been attributed by Dr. Lillian Batchelor, of the School District of Philadelphia, to the fact that few elementary schools in disadvantaged areas have previously had libraries; of those that did have libraries, most were poorly equipped. Consequently, effective implementation of a new program dictates the services of a professional librarian.

15-7. RECOMMENDATIONS

1. Continue the program.
2. Hire professional librarians with special emphasis on improving elementary-school libraries.
3. Plan programs which will utilize the materials and equipment already purchased—whether or not professional librarians are hired.

SECTION 16

PROJECT 15, ACADEMICALLY ABLE STUDENTS

16-1. PROJECT DESCRIPTION

16-2. Objectives

The stated objectives of the Academically Able ("Classes for Academically and Potentially Able Students") program were as follows:

1. To select pupils who will demonstrate an improvement in growth rate by the end of the year, and who will continue to improve in achievement throughout the duration of the study towards a level of at least one year above the norm.
2. To construct a program to meet the special needs of pupils with academic ability or potential who are environmentally disadvantaged.
3. To develop communication skills so that the pupil
    a. Participates more frequently in conversation and discussion,
    b. Speaks and writes with fewer errors of grammar and pronunciation,
    c. Expresses himself more fully and with greater clarity,
    d. Writes with a greater degree of legibility, or with legibility equal to the grade standard,
    e. Listens more carefully, and
    f. Reads with more careful attention to "message".
4. To develop a realistic self-concept and aspirational level.
5. To develop positive attitudes toward a wide constellation of vocational possibilities.
6. To raise academic achievement to a level at least one year above grade standard.

16-3. Summary of Project

The project provided extra classes either after school, on Saturday, or both, for 9600 children. The project began in October 1965 with 960 elementary children; the remainder were added in January 1966.

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Children were selected who were considered to be either "academically talented" or "potentially able". Although a format for choosing students was provided, criteria for selection varied from school to school. In general, the following original criteria were used at least as guidelines:

1. Obtain two measures of intelligence, one verbal and one "non-verbal", and select pupils with I.Q. of 110 or better in either.
2. Screen records to locate any pupils one year or more above norm in reading or arithmetic; test with another instrument to verify.
3. Solicit information from teachers concerning any expression or evidence of strong interest in any academic area, regardless of achievement.
4. Solicit information from teachers concerning any unusual isolated performance in an academic area that might suggest an unrealized potential.

Subject matter was determined by each school; the subjects chosen varied greatly, including science, English, journalism, and Russian.

16-4. EVALUATION METHOD

Two measures were used to evaluate the extent to which the stated objectives had been met; one was given to students and the other to teachers. These measures were selected because they carried all the objectives. most of them from both the students' and teachers' viewpoints. However, because every objective was not necessarily relevant to every course in this program (for example, handwriting improvement was not important to a science course), some items on the measuring instruments were unrelated to some courses. Pre-testing of both of these measures, which would have been highly desirable, was impossible because the program already was operating when the evaluation began.

To measure the extent to which objective 1 had been met, it was originally planned to predict scores on Philadelphia tests in elementary grades by extending the growth line and measuring deviation from the predicted score; this measure was discarded in favor of more reliable data from the mass-testing program in grades 4, 6, 8, and 12 (section 22). These data were to have been compared with those of a control group composed of students on the waiting lists for this program. To determine whether students in the program scored significantly higher on a post-test than would students in the control group. Unfortunately, data from the mass-testing program were not available in time to be useful as a pre-test measure. And, because no measures were available for the first part of the year, growth indexes could not be obtained.

The pupil-prepared vocational notebooks originally proposed to accomplish objective 4 were not used because several questions on the two questionnaires administered were directed specifically toward this objective.

The proposed measure of self-concept or aspirational level was withdrawn by the Board of Education after distribution. Time was insufficient to provide a substitute instrument.

16-5. Student Questionnaire

The student questionnaire consisted of 58 items designed to measure the extent to which objectives 2 through 5 had been met. Teachers in the program administered the questionnaire to 5782 students. Of these, 1457 males and 2260 females were in the academically talented program; and 774 males and 1291 females were in the potentially able program.

16-6. Teacher Survey

The teachers' survey was completed by 512 teachers in the program, some of whom taught both academically talented and potentially able students. The survey consisted of 31 questions directed toward measuring the degree to which the stated objectives had been met.

16-7. RESULTS

The results of the Student and Teacher Questionnaires administered for this program are summarized under the following two headings; and more detailed related data on the two questionnaires are compared under heading 16-10. Detailed raw data are presented in Appendix 16A for the Student Questionnaire and in Appendix 16B for the Teacher Questionnaire.

16-8. Student Questionnaire

The following list summarizes students' answers to groups of questions on the questionnaire:

> *Selection criteria.* Although many students in both programs were sure that grades, test scores, and teachers' opinions played at least some role in their selection, they were typically uncertain about the degree; they were least certain of the role played by the parents' wants.
>
> *Reasons for participating—*
>
> This year. The largest number of students participated in the program this year to learn new things; more than 50 percent attended because of the honor of being asked; a substantial number (but fewer than 50 percent) went because their mother

or father wanted them to and/or because they felt that the regular school work was too easy; and only a few went because their friends were in the program.

Next year. Students indicated that they would attend the extra classes next year for the same reasons they attended this year, except that more said they would go because of the honor and more (more than 50 percent) would go because their parent(s) wanted them to. They also indicated that they would want to attend classes next year twice a week or every day.

Difficulty of classes. Although the largest group of students thought the extra classwork was more difficult than that of other classes, answers were distributed over the alternatives and no majority view was expressed. The majority of students felt that they were helped in their regular work by the extra classes, and that they learned more than they did in their regular classes; they also expressed more interest in the extra classes than in regular classes.

Skills improvement. Students felt that they talked more in group discussions; and that their speech, handwriting, grammar, written work, and reading improved over that of a year ago. They also felt that they listened more than they did a year ago.

Opinion of teachers. More students thought that the teachers were of about the same quality as that of regular teachers than had any other single opinion; however, far more thought that they were better than regular teachers than thought they were worse. Also, students typically said that their teachers had to explain things to them "sometimes."

Job attitudes—

Amount of training. The majority of students felt that they and their friends would have to finish 4 or more years of college to get a good job. A substantial number felt that a high-school education was enough, but far more thought that some college was necessary.

Attractiveness of occupations and availability of jobs. Male students' opinions concerning the attractiveness of unskilled through professional occupations, and their evaluation of the liklihood that they could get a job in these categories, are summarized in Table 16-1. In general, the boys' liking for an occupation increases as the socio-economic status of the occupation increases; and the estimated opportunity to enter an occupational category increases to the semiprofessional level, but decreases at the professional level. Male students were selected for these figures because more male occupations were included in the relevant questions than were female occupations.

Table 16-1. Comparison of Occupational Categories Liked by Boys in Academically Talented-Potentially Able Program with Boys' Estimations of Their Chances of Entering These Categories

Category	Like Category		Have Good or Very Good Chance to Enter Category		Significance of Difference (p)
	Number	Percent	Number	Percent	
Unskilled	160	4	899	15	< 0.001
Semiskilled	393	11	1073	18	< 0.001
Skilled	483	13	1118	19	< 0.001
Semiprofessional	1193	32	1467	26	< 0.001
Professional	1496	40	1320	22	< 0.001

School attitudes and actions. Table 16-2 summarizes feelings toward, and behavior in, school by boys and girls in this program, girls have significantly more favorable feelings toward and behavior in school than do boys.

Relationship of actions to friends' wishes. Students usually said that they did what their friends wanted them to do "sometimes". However, students in the academically talented program were more likely to say that they "never" or "almost never" did what their friends wanted them to than were students in the potentially able program.

*Table 16-2. Feelings Toward, and Behavior in, School by Students in Academically Talented-Potentially Able Program **

Type of Answer	Girls		Boys	
	Number	Percent	Number	Percent
Most unfavorable	498	1	522	2
Unfavorable	699	2	720	3
Neither favorable nor unfavorable	5,944	16	4,623	21
Favorable	9,547	27	6,575	30
Most favorable	18,742	54	9,774	44

***Combined results of 10 questions.**

16-9. Teacher Questionnaire

The following list summarizes teachers' answers to groups of questions on the Teacher Questionnaire:

Selection of teachers. Teachers in this program generally felt that teachers, including themselves, were selected on the basis of ability; this opinion agrees with reports from administrators. In addition, teachers generally thought that teachers in the program were better than average in the Philadelphia Public Schools. Teachers generally disagreed strongly that teachers had no choice in deciding to participate in the program. Their opinions varied as to the influence of extra money on volunteering, but few agreed that they themselves had been so influenced.

Value of extra classes. Teachers disagreed about the amount of learning students had gotten from the special classes, but more felt they had learned "a lot about a few things" than thought they had learned "a lot about many things" or "a little about many things". Teachers also felt generally that these classes helped students do their regular schoolwork better.

Difficulty and interest of classes. Teachers generally thought that the classes were more interesting but less difficult to teach. The teachers also felt that the extra classes were slightly harder but much more interesting for the students than their regular classes.

Participation next year. Teachers generally thought that both they and the students would want very much to participate in these classes again next year.

Discussion groups. Many teachers did not form small student discussion groups; of those who did, more scheduled them at least once a week than any other frequency. Most teachers did not make careful records of each student's participation in conversation with other students; of those who did, the majority scheduled them at least once a week. Because some items were irrelevant to particular programs, large numbers of teachers answered "did not do this" on such items. Teachers generally felt that their students were participating in conversation with teachers much more, with students slightly or much more, and in classroom discussion much more after the program than at its start.

Grammar, spelling, and handwriting. Many teachers did not mark written work for grammar and spelling and make records to show trends of individual students in their extra classes; most of those who did kept records at least once a week. Many teachers did not give either brief or precise written exercises; of those who did, most gave them at least once a week. Few teachers kept records of students' progress in handwritting. Most teachers did not display well-written papers or allow good writers to write for the class to demonstrate good penmanship; of those who did, most showed them at least once a week.

Reading and oral comprehension. Most teachers did not give written tests to seek evidence of improving reading comprehension; of those who did, most did so at least once a month. Most teachers did give *oral* directions and analyzed students' work to show missed meaning at least once a week. Of the teachers who gave *written* instructions and analyzed the results for missed meaning, most did so at least once a week. Only a few teachers brought in vocational speakers, most only once or twice during the year; the same was true for class visits to business and industry. Few teachers organized games demanding careful listening, and most of these less frequently than twice a week.

16-10. Comparison of Students' and Teachers' Attitudes on Related Areas

The following comparisons between students' and teachers' responses to the same or similar questions are significant; Table 16-3 lists group responses to these questions:

Difficulty of extra classes. Students thought the extra classes were "much harder" than their regular classes, while teachers judged them "harder".

Interest of extra classes. A considerable majority of both students and teachers thought the extra classes were much more interesting than their regular classes.

Quality of teachers. Teachers rated themselves significantly further above the Philadelphia norm for public-school teachers than did pupils.

Student participation in classroom discussion. Teachers felt that participation by students in group classroom discussions had improved significantly more than did students.

Effect on students' regular schoolwork. Students felt that the extra classes had improved their regular schoolwork significantly more than did teachers.

Amount students learned. Although a heavy majority of students felt that they had learned "a lot about many things", teachers' responses were significantly different, showing a wider distribution of opinion and no majority opinion.

Table 16-3. Responses of Students and Teachers, and Statistical Significance of Differences, to Similar Questions

Question			Students		Teachers		Statistical Significance of Difference (p)
Student	Teacher	Subject	Number	Percent	Number	Percent	
50	25	Difficulty of extra classes compared to regular classes:					
		Much more	539	10	34	7	<0.001
		Slightly more	2046	38	286	56	
		No different	1032	19	61	12	
		Slightly less	838	15	71	14	
		Much less	962	18	57	11	
45	18	Degree of interest of extra classes compared to that of regular classes:					
		Much more	3417	61	316	62	NS
		Slightly more	1119	20	129	26	
		About same	648	12	21	4	
		Slightly less	195	4	0	0	
		Much less	167	3	43	8	
17	17	Quality of teachers in extra classes compared to that of regular school teachers:					
		Much better	1126	19	196	39	<0.001
		Better	1505	26	186	37	
		No different	2824	49	108	22	
		Worse Much worse	318	6	9	2	
30	16	Degree of participation in classroom (group) discussions (compared to that of preceding year:					
		Much more	2256	50	438	86	<0.001
		Somewhat more	434	9	50	10	
		No less Somewhat less much less	1934	41	21	4	

Table 16-3. Responses of Students and Teachers, and Statistical Significance of Differences, to Similar Questions (cont)

Question			Students		Teachers		Statistical Significance of Difference (p)
Student	Teacher	Subject	Number	Percent	Number	Percent	
26	12	Effect of extra classes on students' regular schoolwork:					
		Much better	3207	56	145	29	< 0.001
		Better	1868	32	288	57	
		No different	541	9	60	12	
		Worse Much worse	153	3	11	2	
35	28	Amount students learned in extra classes:					
		A lot about many things	3451	65	128	25	< 0.001
		A lot about few things	769	15	196	38	
		A little about many things	678	12	142	28	
		A little about a few things	312	6	40	8	
		Nothing	87	2	2	1	

16-11. CONCLUSIONS

Based on the survey results, the following conclusions are drawn:

1. Attitudes of students toward school and schoolwork are generally favorable.
2. Attitudes toward the extra classes are generally favorable. They were felt to be profitable by both teachers and students, and most students would continue the classes if given the opportunity.
3. Teachers reported improvement by students in spoken and written English.
4. Overall group participation was better for the special classes than for regular classes, but apparently varied widely from child to child.
5. Reported aspirational levels are high for boys, and higher than their perceptions of opportunity; however, except for clinical procedures, no means exist for establishing *realistic* levels.

16-12. RECOMMENDATIONS

1. If objective 3 is retained for this project, teachers must maintain more complete records of student participation in class; without such records the extent to which this objective has been met cannot be successfully measured.
2. Obtain pre- and post- objective measures in the subject areas.
3. Allot and spend more time planning, organizing, and evaluating the project than was spent last year.
4. Evaluate carefully the changes recommended in the Project Staff's self-evaluation (Appendix 16-C) to determine their applicability and feasibility (FIRL discussion of some of these recommendations are included with the appendix).

APPENDIX 16-A

FREQUENCY OF RESPONSE OF ANSWERS TO STUDENT QUESTIONNAIRE

The following table indicates the number of responses to each possible answer to questions 2 through 58 of the Student Questionnaire administered as part of the Potentially Able-Academically Talented Title I program. The number of responses is listed individually for males and females in each of the two types of programs.

The questions themselves are reproduced following the table.

Question Number	A				B				C				D				E			
	PAS		AT		PAS		AT		PAS		AT		PAS		AT		PAS		AT	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2	3	1	12	8	12	1	16	12	55	41	145	156	407	603	750	974	297	645	534	1110
3	0	5	9	4	8	2	17	15	114	111	307	348	409	722	732	1089	222	450	388	806
4	18	8	68	47	47	55	93	139	371	583	602	880	198	382	309	514	140	260	381	676
5	136	181	331	433	123	171	184	265	397	728	690	1132	96	167	187	315	21	41	65	114
6	21	26	60	59	47	47	91	65	202	198	269	300	216	398	325	414	288	620	712	1421
7	8	2	18	20	7	4	40	31	58	52	161	164	162	215	308	378	537	1015	922	1658
8	11	3	12	10	0	4	22	13	50	93	121	189	160	255	255	410	549	932	1041	1628
9	8	15	45	47	7	5	17	8	56	39	114	118	276	351	381	427	423	877	898	1657
10	16	13	72	66	30	14	64	50	152	158	283	311	181	281	307	367	393	819	726	1460
11	18	32	62	92	43	70	104	117	435	691	757	1187	235	434	424	677	38	62	100	172
12	16	8	47	31	13	10	42	37	123	89	248	236	209	261	231	395	413	920	772	1554
13	22	23	78	74	42	47	110	115	348	649	727	1187	287	462	409	641	74	109	131	241
14	47	60	90	116	43	64	88	79	49	71	91	117	245	455	391	643	390	639	790	1294
15	28	14	36	38	26	26	58	48	58	89	91	148	306	416	503	586	357	743	765	1433
16	693	1170	1076	1197	31	66	176	210	26	21	134	146	7	10	35	21	15	20	32	72
17	24	25	73	70	21	29	33	43	334	684	644	1162	227	331	405	542	169	218	302	437
18	193	319	511	843	179	339	342	566	86	110	129	162	38	57	85	77	257	431	349	545
19	201	317	317	494	442	752	730	1150	81	139	224	314	39	70	143	233	8	8	36	60
20	204	296	306	503	50	72	121	145	75	103	127	101	246	485	747	716	184	321	438	777
21	67	24	326	392	105	144	260	353	576	1046	825	1358	9	10	18	21	12	11	22	34
22	25	26	62	58	44	62	82	95	46	95	90	163	303	514	497	819	353	588	720	1086
23	289	365	646	820	334	592	474	830	125	305	269	512	12	14	26	48	10	9	24	48
24	272	433	368	590	55	86	109	159	101	131	133	159	204	405	452	722	126	216	360	609
25	21	31	113	153	37	96	172	287	95	124	188	249	410	743	639	1006	202	292	338	481
26	365	593	848	1401	289	504	417	658	96	173	124	148	12	8	36	24	6	8	21	28
27	134	236	361	566	155	234	233	394	281	416	415	564	74	104	146	224	120	285	277	494
28	7	9	25	29	9	7	42	32	87	227	239	442	317	602	534	862	351	437	597	878
29	325	512	409	689	59	71	127	145	93	144	139	167	191	337	390	631	102	214	364	607
30	297	503	563	993	230	406	315	483	162	214	239	309	32	68	102	122	49	91	213	333

Question Number	A				B				C				D				E			
	PAS		AT		PAS		AT		PAS		AT		PAS		AT		PAS		AT	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
31	107	230	239	472	100	225	193	321	544	816	952	1408	8	3	19	19	16	9	24	24
32	18	14	47	73	80	112	112	165	139	237	227	294	148	231	212	273	383	683	822	1330
33	454	766	716	1212	59	116	141	202	137	183	204	262	71	139	198	291	39	73	165	270
34	217	497	363	770	85	195	176	240	85	142	181	222	100	143	260	370	273	291	440	522
35	124	253	422	659	147	275	286	481	128	160	184	229	52	84	103	129	310	496	399	702
36	178	333	417	654	153	194	175	204	125	215	179	227	182	292	309	506	118	224	303	592
37	508	859	879	1461	174	316	302	488	23	24	68	67	29	40	71	83	31	33	85	120
38	486	902	669	1286	159	230	317	405	111	133	372	463	7	3	26	30	7	7	26	35
39	24	25	54	83	21	18	61	65	84	126	118	151	218	351	327	423	421	756	832	1473
40	98	100	218	225	40	55	97	133	167	338	220	395	263	415	394	621	192	356	452	809
41	253	243	436	426	59	77	151	185	74	83	154	209	87	179	168	239	289	676	468	1129
42	272	368	381	512	74	102	130	224	92	115	128	163	196	381	363	640	133	292	363	640
43	189	316	383	621	150	165	156	169	137	210	182	263	170	341	334	557	111	221	307	548
44	301	709	688	1426	239	342	379	446	167	151	169	169	37	36	73	66	16	17	41	46
45	471	729	831	1386	167	335	239	378	71	140	157	280	28	32	66	69	24	26	59	58
46	44	62	144	153	22	32	74	83	141	195	213	346	241	366	376	562	310	598	540	1018
47	106	204	325	538	147	219	221	384	170	229	234	334	42	86	126	140	283	500	417	736
48	200	348	406	637	180	270	205	298	144	231	212	345	145	257	283	439	77	123	208	394
49	26	24	81	76	19	24	59	73	95	109	129	155	272	452	391	582	339	632	665	1245
50	128	203	234	397	114	202	220	302	156	280	214	382	291	466	485	804	58	83	161	237
51	240	244	446	455	139	192	293	369	132	202	259	365	80	179	114	244	146	407	197	665
52	448	744	640	1139	88	128	180	207	116	195	188	290	52	109	152	231	38	55	128	221
53	112	208	363	595	118	184	276	460	126	229	247	366	337	499	277	442	37	98	126	212
54	406	783	845	1453	246	325	288	415	65	89	95	137	15	22	33	34	3	8	31	28
55	405	726	834	1486	148	193	173	255	110	207	163	198	57	82	73	100	13	10	36	28
56	51	117	155	277	34	81	74	131	133	211	236	403	229	354	334	498	282	456	475	743
57	470	898	723	1464	147	179	262	270	102	124	248	260	5	6	12	17	8	11	24	30
58	439	809	761	1113	196	298	285	470	25	23	59	67	20	17	52	53	43	51	91	104

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STUDENT QUESTIONNAIRE

Directions for Questions 1 through 13

Each of the first 13 questions is a sentence followed by three or five suggested answers. Decide which one of these answers is best for you; that is, which answer best describes the way you feel.

(1) What times of the week did your extra class meet?

A. On Saturdays
B. After school on weekdays
C. During regular school time

(2) I complete my school work.

A. Never
B. Almost never
C. Sometimes
D. Most of the time
E. Always

(3) I get good grades.

A. Never
B. Almost never
C. Sometimes
D. Most of the time
E. Always

(4) I get bored in school.

A. Always
B. Most of the time
C. Sometimes
D. Almost never
E. Never

(5) I do what my friends want me to.

A. Never
B. Almost never
C. Sometimes
D. Most of the time
E. Always

(6) I let my school work go to the last minute.

A. Always
B. Most of the time
C. Sometimes
D. Almost never
E. Never

(7) My work is the poorest in the class.

A. Always
B. Most of the time
C. Sometimes
D. Almost never
E. Never

(8) I like to learn about something new.

A. Never
B. Almost never
C. Sometimes
D. Most of the time
E. Always

(9) I do what my teachers tell me to.

A. Never
B. Almost never
C. Sometimes
D. Most of the time
E. Always

(10) My parents need to remind me to do my school work.

A. Always
B. Most of the time
C. Sometimes
D. Almost never
E. Never

(11) My work is the best in the class.

A. Never
B. Almost never
C. Sometimes
D. Most of the time
E. Always

(12) My teachers need to remind me to do my school work.

A. Always
B. Most of the time
C. Sometimes
D. Almost never
E. Never

(13) My teachers have to explain things to me.

A. Always
B. Most of the time
C. Sometimes
D. Almost never
E. Never

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Directions for Questions 14 through 58

In each of the following questions is a sentence with a blank space. After the sentence there are five suggested answers for the blank space. You are to choose the answer for the blank space which is best for YOU; that is, which answer is the way you feel. For example:

X. I like ________ better than anything.

A. Ice cream
B. Bananas
C. Oranges
D. Apples
E. Potato chips

If for you the best answer for the blank space is: B, Bananas - then you would blacken in the space for answer B.

(14) Compared to my regular school classes I learned __________ in the extra classes.

A. much less
B. a little less
C. the same as
D. a little more
E. much more

(15) My written work is ______ now than it was last year

A. much worse
B. a little worse
C. no different
D. a little better
E. much better

(16) Longshoreman, odd job man, street sweeper, dish washer, garbage pickup man, coal miner, truck loader, car washer

When I'm an adult I would ________ to be one of these.

A. not like
B. not know if I'd like
C. like

(17) The teachers in the extra classes were ______________ than my regular school teachers.

A. much worse
B. worse
C. no different
D. better
E. much better

(18) Because my father wants me to will ____ reason for me wanting to go to the extra classes next year.

A. be a very important
B. be an important
C. be an unimportant
D. be a very unimportant
E. not be a

(19) When writing I make _____ mistakes in grammar now than I did last year.

A. many fewer
B. fewer
C. no more
D. a few more
E. many more

(20) The honor of having been one of those chosen will ______ reason for me wanting to go to the extra classes next year.

A. not be a
B. be a very unimportant
C. be an unimportant
D. be an important
E. be a very important

(21) Factory worker, night watchman, taxi driver, gas station man, waiter, bus driver, store clerk, maid, subway token seller.

When I'm an adult I would _____ to be one of these.

A. like
B. not know if I'd like
C. not like

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(22) Compared to our regular school classes most of us learned _____ in the extra classes.

A. much less
B. a little less
C. the same as
D. a little more
E. much more

(23) Most of my friends will be able to get a good job when they finish ______.

A. more than four years of college
B. four years of college
C. high school
D. the eighth grade
E. the sixth grade

(24) Because my mother wants me to will ___ reason for me wanting to go to the extra classes next year.

A. not be a
B. be a very unimportant
C. be an unimportant
D. be an important
E. be a very important

(25) When talking I make ____ mistakes in grammar now than I did last year.

A. many more
B. a few more
C. no fewer
D. fewer
E. many fewer

(26) The extra classes helped me do ___ in my regular school work.

A. much better
B. a little better
C. no better
D. a little worse
E. much worse

(27) The fact that the regular work in school is too easy will _____ reason for me wanting to go to the extra classes.

A. be a very important
B. be an important
C. be an unimportant
D. be a very important
E. be a

(28) To get a good job I should finish ____.

A. the sixth grade
B. the eighth grade
C. high school
D. four years of college
E. more than four years of college

(29) The fact that my mother wanted me to attend was ____ reason for me wanting to go to the extra classes.

A. not a
B. a very unimportant
C. an unimportant
D. an important
E. a very important

(30) I talk ___ now in group discussions in school than I did last year.

A. much more
B. somewhat more
C. no less
D. somewhat less
E. much less

(31) Lawyer, doctor, school superintendent, psychologist, company president, college teacher, physicist, astronomer.

When I'm an adult I would _____ to be one of these.

A. not like
B. not know if I'd like
C. like

(32) In these extra classes most of us learned _____.

A. nothing
B. a little about a few things
C. a little about many things
D. a lot about a few things
E. a lot about many things

(33) Because some of my friends will be going will ____ reason for me wanting to go to the extra classes next year.

A. not be a
B. be a very unimportant
C. be an unimportant
D. be an important
E. be a very important

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(34) Factory worker, nightwatchman, taxi driver, gas station man, waiter, bus driver, store clerk, maid, subway token seller.

When I'm an adult I'll have ___ chance of being one of these.

A. no
B. hardly any
C. some
D. a good
E. a very good

(35) The fact that my father wanted me to attend was ___ reason for me wanting to go to the extra classes.

A. a very important
B. an important
C. an unimportant
D. a very unimportant
E. not a

(36) When I was chosen for this special class my test scores were ___ in choosing me.

A. used in some way I didn't know about.
B. of little or no importance
C. just one of a lot of things used
D. one of the most important things used
E. the most important thing used

(37) The chance to learn new things was ___ reason for me wanting to go to the extra classes.

A. a very important
B. an important
C. an unimportant
D. a very unimportant
E. not a

(38) Truck driver, carpenter, barber, fireman, policeman, cook, bartender, beauty operator, insurance salesman, plumber.

When I'm an adult I would _____ to be one of these.

A. not like
B. not know if I'd like
C. like

(39) I listen__ carefully now than I did last year when the teacher talks.

A. much less
B. a little less
C. no more
D. a little more
E. much more

(40) If there are extra classes next year I will ___.

A. not want to be in them at all.
B. want to be in them only once a month.
C. want to be in them once a week.
D. want to be in them two or three times a week
E. want to be in them every day

(41) Longshoreman, odd job man, street sweeper, dishwasher, garbage pickup man, coal miner, truck loader, car washer.

When I am an adult I'll have ___ chance of being one of these.

A. a very good
B. a good
C. some
D. hardly any
E. no

(42) The honor of having been one of those chosen was ___ reason for me wanting to go to the extra classes.

A. not a
B. a very unimportant
C. an unimportant
D. an important
E. a very important

(43) When I was chosen for this extra class my grades were ___in choosing me.

A. used in some way I didn't know about
B. of little or no importance
C. just one of a lot of things used
D. one of the most important things used.
E. the most important thing used

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(44) My handwriting is ____ now than it was last year.

A. much better
B. a little better
C. no better
D. a little worse
E. much worse

(45) Compared to my regular school classes, these extra classes were ____ interesting.

A. much more
B. slightly more
C. about as
D. slightly less
E. much less

(46) Teacher, nurse, minister, computer operator, engineer, editor, department manager, accountant, social worker, parole officer, astronaut, Officer in the Army or Navy.

When I am an adult I'll have ____ chance of being one of these.

A. no
B. hardly any
C. some
D. a good
E. a very good

(47) The fact that the regular work in school is too easy was _____ reason for me wanting to go to the extra classes.

A. a very important
B. an important
C. an unimportant
D. a very unimportant
E. not a

(48) When I was chosen for this special class my teachers' opinions of me were ____ in choosing me.

A. used in some way I didn't know about
B. of little or no importance
C. just one of a lot of things used
D. one of the most important things
E. the most important things

(49) My speaking is ____ now than it was last year.

A. much worse
B. a little worse
C. no better
D. a little better
E. much better

(50) Compared to my regular school classes these extra classes were ____.

A. much easier
B. a little easier
C. no different
D. a little harder
E. much harder

(51) Truck driver, carpenter, barber, fireman, policeman, cook, bartender, beauty operator, used car salesman, storekeeper, postman, insurance salesman, plumber, Private in the Army, Seaman in the Navy.

When I am an adult I'll have ____ chance of being one of these.

A. very good
B. a good
C. some
D. hardly any
E. no

(52) The fact that some of my friends were going to the extra classes was ____ reason for me wanting to go to the extra classes.

A. not a
B. a very unimportant
C. an unimportant
D. an important
E. a very important

(53) When I was chosen for this extra class, my parents wanting me to attend was ____ in choosing me.

A. the most important thing used
B. one of the most important things used
C. just one of a lot of things used
D. of little or no importance
E. used in some way I didn't know about

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(54) My reading is ____ now than it was last year.

A. much better
B. a little better
C. no better
D. a little worse
E. much worse

(55) In these extra classes I learned ____.

A. a lot about many things
B. a lot about a few things
C. a little about many things
D. a little about a few things
E. nothing

(56) Lawyer, doctor, school superintendent, psychologist, company president, college teacher, physicist.

When I am an adult I'll have ____ chance of being one of these.

A. no
B. hardly any
C. some
D. a good
E. a very good

(57) Teacher, nurse, minister, computer programmer, engineer, editor, department manager, accountant, social worker, parole officer, astronaut.

When I'm an adult I would _____ to be one of these.

A. like
B. not know if I'd like
C. not like

(58) The chance to learn new things will ____ reason for me wanting to go to the extra classes next year.

A. be a very important
B. be an important
C. be an unimportant
D. be a very unimportant
E. not be a

END OF QUESTIONNAIRE

APPENDIX 16-B

FREQUENCY OF RESPONSES BY 512 TEACHERS TO PAS-AT QUESTIONNAIRE

(Number of responses to each answer is listed to left of answers.)

1. The teachers for these extra classes were selected because they have outstanding ability to teach.

224 A. Strongly agree.
132 B. Slightly agree.
101 C. Don't know.
32 D. Slightly disagree.
22 E. Strongly disagree.

2. How often did the students in your extra class form into small groups for work and discussion with each other?

132 A. Did not do this.
65 B. At least once or twice during the year.
89 C. At least once per month.
164 D. At least once per week.
62 E. Twice or more each week.

3. How often did you give oral directions to the students in your extra class and then analyze their work to show where students missed meaning?

53 A. Did not do this.
41 B. At least once or twice during the year.
59 C. At least once per month.
230 D. At least once per week.
128 E. Twice or more each week.

4. The teachers for these extra classes volunteered because they wanted the extra money.

143 A. Strongly agree.
93 B. Slightly agree.
100 C. Don't know.
46 D. Slightly disagree.
130 E. Strongly disagree.

5. How often did you mark written work for grammar and spelling and make records to show trends of individual students in your extra class?

279 A. Did not do this.
33 B. At least once or twice during the year.
58 C. At least once per month.
101 D. At least once per week.
35 E. Twice or more each week.

6. Compared to the regular classes that I teach, these extra classes were ______ interesting to me.

19 A. much less
6 B. slightly less
59 C. about as
126 D. slightly more
297 E. much more

7. I had no choice in deciding to participate as a teacher in this Title I project.

16 A. Strongly agree.
22 B. Slightly agree.
10 C. Don't know.
34 D. Slightly disagree.
430 E. Strongly disagree.

8. In general, most students participating in your extra classes engage in conversation with the teacher ______ now than (as) at the beginning of the program.

471 A. much more
25 B. somewhat more
11 C. about as much
2 D. somewhat less
3 E. much less

9. How often did you bring in speakers from outside organizations to discuss the vocational aspects of course content with the students in your extra class?

446 A. Did not do this.
39 B. At least once or twice during the year.
10 C. At least once per month.
6 D. At least once per week.
5 E. Twice or more each week.

10. In your extra class, how often did you recognize good penmanship by such means as displaying well-written papers or allowing good writers to write for the class?

363 A. Did not do this.
37 B. At least once or twice during the year.
39 C. At least once per month.
46 D. At least once per week.
14 E. Twice or more each week.

11. In your extra class, how often did you give written tests to seek evidence of improving reading comprehension?

341 A. Did not do this.
40 B. At least once or twice during the year.
65 C. At least once per month.
43 D. At least once per week.
17 E. Twice or more each week.

12. The extra classes helped most of the participating students do ______ in their regular school work.

9 A. much worse
2 B. a little worse
60 C. no different
288 D. a little better
145 E. much better

13. In your extra class, how often did you make careful records of each student's participation in conversation with other students?

318 A. Did not do this.
41 B. At least once or twice dur during the year.
40 C. At least once each month.
80 D. At least once each week.
27 E. Twice or more each week.

14. If there are extra classes in connection with this program next year, I will ______.

58 A. not want to teach in them at all.
22 B. want to teach in them a little bit.
90 C. want somewhat to teach in them.
337 D. want very much to teach in them.

15. The teachers for these extra classes had no choice in whether or not they would participate.

20 A. Strongly agree.
13 B. Slightly agree.
39 C. Don't know.
39 D. Slightly disagree.
399 E. Strongly disagree.

16. In general, most students participating in the extra classes engaged in classroom discussion ______ now than (as) at the beginning of the program.

438 A. much more
50 B. somewhat more
18 C. about as much
0 D. somewhat less
3 E. much less

17. Compared to the average teacher in the Philadelphia Public Schools, the average teacher selected for the extra classes was ______.

5 A. much worse.
4 B. slightly worse.
108 C. no different.
186 D. slightly better.
196 E. much better.

18. Compared to their regular school classes, these extra classes were ______ interesting for the students.

43 A. much less
0 B. slightly less
21 C. about as
129 D. slightly more
316 E. much more

19. In your extra class, how often did you give written directions to students and then analyze their work to show where students missed meaning?

176 A. Did not do this.
44 B. At least once or twice during the year.
86 C. At least once per month.
155 D. At least once per week.
46 E. Twice or more each week.

20. In your extra classes, how often did you record students' progress in handwriting?

429 A. Did not do this.
18 B. At least once or twice during the year.
22 C. At least once per month.
24 D. At least once per week.
10 E. Twice or more each week.

21. Compared to the regular classes that I teach, these extra classes were ______ to teach.

233 A. much less difficult
72 B. slightly less difficult
80 C. no different
93 D. slightly more difficult
31 E. much more difficult

22. I volunteered to participate in the Title I project because I wanted the extra money.

197 A. Strongly disagree.
81 B. Slightly disagree.
9 C. Don't know.
163 D. Slightly agree.
58 E. Strongly agree.

23. How often did the students in your extra class play games that demanded careful listening, such as "Simon Says"?

360 A. Did not do this.
46 B. At least once or twice during the year.
46 C. At least once per month.
43 D. At lease once per week.
13 E. Twice or more each week.

24. In your extra class, how often did you give brief written exercises?

156 A. Did not do this.
50 B. At least once or twice during the year.
94 C. At least once per month.
173 D. At least once per week.
34 E. Twice or more each week.

25. Compared to their regular school classes these extra classes were ______. for the sutdent.

34 A. much more difficult
286 B. slightly more difficult
61 C. no different
71 D. slightly less difficult
57 E. much less difficult

26. If there are extra classes in connection with this program next year, most of the students in my extra class will ______.

357 A. want very much to be in them.
134 B. want somewhat to be in them.
13 C. want to be in them a little bit.
3 D. not want to be in them at all.

27. In general, most students participating in your extra classes engage in conversation with other students ______ now than (as) at the beginning of the program.

182 A. much more
199 B. somewhat more
121 C. about as much
3 D. somewhat less
5 E. much less

28. In these extra classes, most of the students learned ______.

2 A. nothing
40 B. a little about a few things.
142 C. a little about many things.
196 D. a lot about a few things.
128 E. a lot about many things.

29. I was selected as a teacher for this Title I project because of my ability.

227 A. Strongly agree.
149 B. Slightly agree.
99 C. Don't know.
15 D. Slightly disagree.
20 E. Strongly disagree.

30. How often did your extra class visit business and industry to see job operations?

420 A. Did not do this.
62 B. At least once or twice during the year.
17 C. At least once per month.
5 D. At least once per week.
2 E. Twice or more each week.

31. In your extra class, how often did you hold written exercises in precise composition, such as composing telegrams, letters of application, and writing directions?

376 A. Did not do this.
36 B. At least once or twice during the year.
36 C. At least once per month.
44 D. At least once per week.
8 E. Twice or more each week.

APPENDIX 16-C

PROJECT DIRECTOR'S EVALUATION

This appendix consists of the complete text of a summary report of the Academically Talented - Potentially Able Program compiled by the Project Director. It is a compilation of written comments by both teachers and students who participated in the project; no indication is given in the report of the frequency of occurrence of these comments.

Immediately following the report are comments by FIRL evaluators concerning recommendations made in the report.

EVALUATION OF THE ACADEMICALLY TALENTED AND POTENTIALLY ABLE STUDENTS PROGRAM (1965-1966)

Report of the Project Director

The following summary report consists of an evaluation of the Academically Talented (AT) and Potentially Able Students (PAS) Program instituted in the elementary and secondary schools during the 1965 - 1966 school term. This program consisted of enrichment type study and activities for one hour after school (3:00 - 4:00/3:30 - 4:30) and on Saturday mornings. The program was made available to the school children of Philadelphia under the National Elementary and Secondary Education Act sponsored by the federal government.

This evaluation of the program was made by the teachers and students who participated in it. This should prove enlightening to all those concerned, both administrators and teachers, in formulating guidelines and curriculum for future implementation in the AT-PAS Program.

The following evaluation will emphasize these specific categories of comment and suggestions:

I. Favorable Comments
II. Unfavorable Comments (Critique)
III. Pupil Comments
IV. Recommendations

I. FAVORABLE COMMENTS

A. Planning

Many teachers liked the idea of being able to plan and structure their own individual program of study and activities. Flexibility within the program allowed for more creative teaching. The opportunity to use new techniques of instruction was rewarding to the teachers.

B. Teacher Attitudes

Teachers felt that definite educational needs of the student were met by the AT-PAS Program. Pupil-teacher relationships and rapport improved in a smaller class situation. Disciplinary problems showed a marked drop in frequency. It was generally felt that the more relaxed atmosphere in after-school classes improved the teachers' attitude and morale.

C. Pupil Attitudes and Performance

A general consensus of opinion on the part of teachers indicates that when the child is challenged, and a high standard of work is set, performance and quality of work by the pupils shows a very definite improvement.

The program acted as a "booster" for the students — the pupils gave indications of increased mental alertness. The child's self-image was strengthened by the opportunity to participate in a meaningful and challenging experience. Many students showed a definite readiness to assume leadership roles.

A good many of the boys and girls showed an aroused curiosity, and a questioning attitude toward their environment was clearly manifest. The students showed an increased use of books — the use of the library and other resource material was evident.

It was found generally, that pupils responded better when they were not responsible for being tested and evaluated on their performance.

D. Materials and Supplies

The teachers appreciated the fact that materials and supplies could be purchased without restrictions from textbook, supply, and instructional aids lists. The many different and new resource materials enthused both the teachers and the students. The teachers and the pupils appreciated the fact that much of the new resource material allowed for independent activities and study in the subject areas of science, language arts, mathematics, art and music.

E. Instructional Grouping

Many teachers appreciated the fact that the AT-PAS Program gave an opportunity to pupils of all ethnic and racial groups to work and associate together in their classes.

Both homogeneous and heterogeneous grouping of pupils seemed to find favor with the teachers. It was felt that homogeneous grouping allowed the instructor to deal with concepts and subject material in greater depth. Many teachers favored heterogeneous grouping because it gave them the opportunity to work with children from various neighborhoods in their districts.

F. Parent Reaction

Parent reactions to the AT-PAS Program, on the whole, were favorable. Parents indicated that, because of the program, they were made more aware of the school and its aims. The parents were interested in the new approaches in education being made available to their children.

II. UNFAVORABLE COMMENTS (CRITIQUE)

A. Planning

A general consensus on the part of the teachers who participated in the AT-PAS Program indicates that there was insufficient planning of the program before it was implemented. It was generally felt that there was not enough specific direction from the higher administrative echelon.

More specifically, the following points recur among teacher comments:

1. The goals of the program were vague and ill-defined.
2. There were competing programs which made staffing of classes difficult.
3. There was not enough planning time in teaching teams.
4. There was lack of planning for sharing ideas at staff meetings.
5. Too often there were overlapping programs.
6. In the Saturday morning classes there was a lack of time to develop a program with sufficient planning.
7. The AT-PAS Program started too late in the term — there wasn't enough time to develop the subject satisfactorily.

B. Teacher Attitudes

Many teachers felt that there was a lack of clarification as to the meaning of the terms "academically talented" and "potentially able". This led to poor screening methods for admitting students to classes in the program.

An opinion which seemed to recur was that there was not sufficient monetary compensation for the efforts and time given to the program by the teachers.

Another view stated frequently was that student attendance in class was irregular; and further, follow-up of student attendance was difficult.

It was stated that in a number of subject areas, notably mathematics and science, there was a lack of qualified teachers in the program.

C. Testing and Questionnaire Survey

In general the testing and questionnaire survey were felt to be inadequate and of little value.

1. Pupil Attitudinal Survey
   a. Survey was not structured well and did not pertain to program.
   b. Children were not skilled in the sophisticated type of reaction required.
   c. The pupil survey should be geared to the particular area in which the children participated.

2. Teacher Attitudinal Survey
   a. Teachers in general resented the attitudinal survey:
      (1). Statements were repeated in another form to check teachers' consistency.
      (2). Statements to the fact that teacher participation was solely based on monetary gains.
      (3). Many of the statements were clumsily phrased and many of the conclusions given were not the conclusions one wished to select.

D. Subject Matter

In general most teachers were pleased in the area of subject matter. They thought the subjects were stimulating and challenging to the teachers as well as the pupils. Many teachers were now given the opportunity to use some of the latest methods, i.e., pupils discovering for themselves.

However, the program was not long enough to develop the subject matter satisfactorily.

E. Materials and Supplies

Materials and supplies were received very late and in some cases not at all. Due to the delay in receiving the funds for supplies and materials most teachers were forced to function without them.

F. Parent Reaction

Parents objected to the AT-PAS Program mainly because it was a longer day for pupils as well as parents. They objected to the average or lower achieving students not being able to participate in a program of this nature. Some felt that federal money should not be spent for an education program of this type. Others felt the children lacked experience and were too often left to work by themselves.

III. PUPIL COMMENTS

A. Favorable

1. Many pupils expressed the hope that the AT-PAS Program would continue next year.
2. The students liked the idea of being able to select their own area of study in the program.
3. Most of the boys and girls enjoyed the experience and felt that it was worthwhile to them.

4. Many students appreciated the fact that the teacher was able to give them more individual aid and instruction than in the regular classroom.
5. Many of the students appreciated the challenging work offered to them in projects and individual activities.
6. The outside trips taken by the children were extremely appreciated by them.

B. Unfavorable

1. Some of the boys and girls disliked the idea of having to attend classes on a Saturday.
2. Many pupils felt that the time was too short to cover the subject to their satisfaction.
3. Some of the children would like to have participated in only one subject area rather than having to attend other classes as well.

IV. RECOMMENDATIONS FOR THE ACADEMICALLY TALENTED AND POTENTIALLY ABLE STUDENTS PROGRAM

A. Planning

Organization

Most felt that each school should continue to organize its own program and recruit its own teachers. Supervisors and administrators should be in attendance also. Consultants or supervisors should make more frequent visits to observe at assigned schools.

A need for secretaries was stated to take charge of extra work involved.

Some suggested the program be on a city-wide basis allowing more to have this opportunity. Also the program could be initiated into the summer school program and incorporated with Operation Outreach during winter months.

Some rejected the idea of cluster schools idea. They felt there was a need for the program in individual schools and the enrollment should consist of students from those specified schools only. Although some felt this a perfect opportunity to foster good public relations between Public and Parochial schools.

Some felt this an excellent opportunity to explore team teaching and to investigate other experimental programs.

A great majority felt a maximum need for thorough and detailed planning on the administrative level at the initial stage of the program.

Pupil-Teacher Selection

Teachers strongly expressed a need for a revision in the selection of teachers and pupils. Teachers should be selected according to interests, ability, and creativity. Some even suggested long-term substitutes if necessary. Pupils should be selected according to interests, grade, and ability.

Teachers felt more background data on pupils was needed.

They also expressed a desire to encourage secondary science teachers for science classes.

Time and Evaluation

Most teachers recommended more time for planning before and during the program. Some felt even one period a month for planning, evaluating, and sharing ideas was excellent.

A collection of children's ideas and interests in advance would aid teachers in meaningful planning.

Evaluation of pupils should be administered at the beginning and end of the program. Also a follow-up or evaluation of pupils in their regular classroom situation.

The surveys were irrelevant to subject matter. They desire surveys that could evaluate growth in subject matter taught and inter-group attitudes fostered.

Relationship with Community

A link between school and home or community should be established to share benefits and goals of the program. Some felt the Counseling Teacher or Home-School Coordinator would best serve this purpose.

B. Subject Matter

There was a feeling that the purpose and goals fo the program should be established and be constantly referred to by teachers and pupils.

Each teacher should be made aware of the purposes, goals, and general information regarding the Title I projects.

Many felt a need for enlargement of the program to include Industrial Arts, Social Studies, Home Economics, and Performing Arts. In other words, the program should meet the needs of the whole community.

The college preparatory classes should become a permanent part of the school program preparing more students for the college board examination.

There should be more provisions made for individual type work on the student's part (kits, SRA labs, etc.).

Some teachers requested guides or guidelines for each subject to be taught prepared by the curriculum office. Still others felt the absence of guides or guidelines allowed more freedom for creativity and ingenuity.

C. Materials and Supplies

1. There should be sufficient time to plan and select books, supplies, and materials to ensure that these materials are available when pupils arrive.
2. There should be a special allotment for small projects which develop.
3. Storage space is needed for materials and supplies.
4. Materials and supplies should be ordered during the summer.
5. Funds should be provided for direct purchasing of materials at the very outset of the program.
6. More audio-visual equipment needed.
7. The AT-PAS Program teachers should be allowed to borrow science equipment from the high schools.

D. Trips

1. A master list of possible trip sites should be distributed to all teachers in the program in advance.
2. School buses should be available to plan trips in advance.
3. Trips outside of school should be a part of the program.
4. More money should be allowed for trips and outside activities.

E. Resources

1. A roster of interesting speakers should be set up.
2. There should be more utilization of community resources.

F. Money Allotment per Pupil

1. A greater expenditure per pupil — twenty dollars on a recurring basis — should be considered.

G. Attract Students' Attention to Program

1. A definite system of offering credit incentive, pay, reward, or schoolwide recognition to students participating in the program.

2. More publicity of the program is needed.
3. More communication with the regular school so that children in the regular school might know what the classes in the program are doing.
4. Inter and intra sharing and visitation between and among AT-PAS schools as well as classes.
5. The program of studies should be planned cooperatively with the students.
6. Pupils should be made aware of the choices in the program.
7. Individual student participation should be emphasized.
8. Pupils should select a special name.
9. Give each routinely titled subject a more interesting title - Say it in Spanish.
10. Snacks should be presented to the children between school closing and time for AT-PAS classes (milk, fruit, cookies).

H. Attendance

1. An attendance system is needed that places the responsibility on the student.
2. Students should be required to submit a written excuse before or immediately after an absence.
3. Students with three unexcused absences should be dropped. Other interested students should be enrolled in their places.
4. To minimize "dropout" rate allow the students an exploratory period of several weeks, during which time they could decide whether or not they are truly interested.
5. More students than necessary should be scheduled to allow for "dropouts".
6. Pupils, who are partially bussed, may have difficulty reaching home after classes. In order that they might continue to attend the classses, a fund might be provided to pay the carfare.

I. Hours and Compensation

1. A yearly calendar of the program is needed.
2. Begin school at 1:00 P.M. so that AT classes can begin at 3:00 P.M. If classes meet for an hour and a half, the children could get home before dark (in winter months). Program should end before hot weather.
3. Teachers should be paid commensurate to the effort and hours worked.

J. Instructional Grouping

1. The size of the class should be left to the discretion of the teacher.
2. No children with emotional problems should be permitted to attend classes regardless of their academic ability.
3. There should be a minimum of four classes in each school in the program (including grades 3 to 6).
4. Institution of team teaching in the Saturday morning school should be seriously considered.
5. Plan the program of studies cooperatively with the students (e.g. hold four different meetings for each of the four main subjects with students attending meetings in which they are most interested).
6. There should be ungraded groups at the junior high level.
7. There should be an after school program for the so-called "average" child and the low achiever.
8. Continue drawing pupils from widely scattered schools.
9. Provide guidelines for foreign language teaching.
10. Classes should meet more than 3 times a week.
11. Have all centers teamed with a school with pupils of opposite racial and ethnic backgrounds (or other differing characteristics). The two schools would meet together at one school for a period of time and then switch to the other school.
12. Arrange for parochial school children who qualify to attend the program.
13. Operation Outreach should be incorporated in each school so that children need not travel to their AT-PAS class.
14. The program for potentially able students should be expanded to include more pupils.
15. In some cases, the hours attended were too long for the younger children in the program.
16. Classes for AT and PAS should begin simultaneously.

COMMENTS ON THE RECOMMENDATIONS MADE IN IN PROJECT DIRECTOR'S REPORT

(Comments are keyed to particular numbered items of the recommendations).

V. A. Planning

It is apparent that insufficient time was allotted for planning the program, and that the program ran remarkably smoothly considering this handicap.

The cluster-school concept fosters greater flexibility in the program and probably provides better teaching through team teaching. It aids in promoting exchange of ideas between teachers in different schools. However, it may keep some children out of the project because of the travel involved.

Pupil-Teacher Selection

The socio-economic status of many children in the program was considerably above the poverty level; however, they are eligible by virtue of their attendance at poverty schools. They probably provide a leavening needed by the more impoverished children for stimulation. Thus, they may promote the goals of Title I indirectly, and, in any event, certain national educational aims are served whether these particular children are impoverished or not.

FIRL sees little need for more background information on these children. This is a program of excitement and discovery in a group situation, not for tutoring or tailoring to individual need. It seems that discovery about the children by both teachers and peers should be a part of the program. Most of the children are not in their own schools, and teacher contact time is small.

Time and Evaluation

As noted above, more planning time is needed. The second year should be much better in this respect. Because surveys were of necessity designed to cross subject areas, some questions were irrelevant to particular projects; it would be neither desirable nor economical to develop a completely different survey instrument for each project. The instrument designed to measure self-image and intergroup attitudes was withdrawn by the School District of Philadelphia.

Objective measures are a must for subsequent evaluations. They were not possible this year.

B. Subject Matter

Since classes for this project meet after regular school hours, it does not seem feasible to expand its content, unless the students are offered various options. However, if a major long-term goal of this project is to prepare children for higher education, as seems implicit in the objectives statement, then the present curriculum is appropriate. If this is indeed a goal of the program, it should be made explicit. Possibly, this underlies the implied uncertainty of the teachers and pupils about the goals of the project.

FIRL feels that the absence of central guidelines from the curriculum office is a positive feature of the program, which probably enables the teacher to make it exciting and worthwhile for the students.

C. Materials and Supplies

Special efforts should be made to utilize the facilities of the learning centers and instructional materials centers for this program.

D. Trips

The benefits derived from trips should be carefully weighed before many trips are undertaken. When trips are taken they should be carefully interwoven with course content rather than offered simply to provide an additional opportunity for students to profit "on their own".

E. Resources

The same comment as in D above applies here. For this group, presentation by outside speakers require somewhat more planning and coordination on the part of the teacher than is usual. Speakers must be very carefully selected, and it is our feeling that a few outstanding speakers who can communicate at the students' level and are willing to do cooperative planning with the teacher will provide greater benefits than a larger number of "average" speakers.

F. Money Allotment per Pupil

No comment.

G. Attract Students' Attention to the Program

Students and their parents need a better introduction to the program than they received in this year's program, which was organized too rapidly for effective orientation.

Incentives to the pupils might be worthwhile, since it is recognized that disadvantaged pupils do not work effectively for long-term goals.

Incentives are especially important at the beginning to convince the pupil and his parents to give the classes a fair trial.

The desirability of more publicity is doubtful; in fact, it may adversely affect the more disadvantaged children whose peers frown on cooperation with the school.

FIRL concurs on the desirability of snacks before after-school classes.

H. Attendance

The suggested "exploratory period" is excellent. It would mean that the child could attend the first few classes without feeling committed. The writer knows of several children in the program who were reluctant to start the program for this reason but whose parents insisted they give it a try; in a few weeks' time they were satisfied and remained in the program.

Provision should be made for the transportation of any qualified student wishing to participate.

I. Hours and Compensation

The start of the afternoon session at 1 P.M. is acceptable for schools having lunchrooms, but not for those without them. If this suggestion is implemented, provision should be made for participating students to take lunch at school.

Since this program, if conducted correctly, will take more than the usual prepararation time, teachers should be appropriately compensated.

J. Instructional Grouping

Children with emotional problems should be excluded only if their behavior is disruptive to the class; many children with emotional problems (e.g. the painfully shy child) can and *should* be permitted to profit from such classes. The shy child may be more profoundly disturbed than the destructive child, though this is often difficult to see in a crowded classroom. Such children may need exactly the kind of experience provided by this project. Perhaps the disturbed child could be required to undergo clinical assessment before being admitted to the class.

Team teaching was undertaken in the Saturday classes in some schools and seems to have worked well. Team teaching may benefit the teachers as much as the pupils.

Some of the success of this program is due to its uniqueness and novelty. The suggestion of special after-school classes for all children removes some of the uniqueness of this project and may thus reduce its effectiveness. However, the overall effect of additional voluntary programs may be good because such special programs draw special attention and increase interest and motivation.

The mixing of children of different races and ethnic backgrounds serves to develop understanding and tolerance. Thus, these classes of able children, who may well provide the leadership of tomorrow, are given a unique opportunity to achieve that understanding so vital to our future. If this is valid for the students, it is equally valid for the teacher and continuing effort should be made toward achieving integrated teams of teachers.

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SECTION 17

PROJECT 16, COUNSELOR AIDE PROGRAM

17-1. PROJECT DESCRIPTION

17-2. Objectives

The objective of this project is to relieve counselors of various subprofessional tasks so that the counselors would be free to spend more time helping individual children, and would be free to counsel with more children. While other benefits may be expected from this project (for example, a lower drop-out rate), the present evaluation was directed toward the increase in amount of individual attention given and increase in number of children counseled.

17-3. Summary of Project

The 37 counselor aides chosen by examination began service on April 25. Following a two-day orientation program, they were assigned to the schools on April 27. The counselor aides were assigned to work with 144 counselors, roughly one counselor aide per four counselors, and were assigned to 15 junior high schools, 13 senior and technical high schools, and 1 remedial disciplinary school.

The counselor aides worked with their counselors through the remainder of the school year. On June 15, a half day was set aside for in-service training. The meeting concentrated on a discussion of common problems in understanding and working with the principal, the school procedures, and the records.

17-4. Evaluation Methods

It was decided to sample the work activity of the counselor both before she received a counselor aide and after she had time to adjust to the aide. However, because of purely administrative matters, it was not possible to sample the activity of the counselors prior to the assignment of the aides. Therefore, the evaluation procedures were used to sample the counselors for one week at the beginning of the project and one week approximately 5 weeks later. Counselors in schools without aides also completed certain forms for comparison with responses of counselors with aides. The analysis presented here is concerned with the sampling of the counselors' work activity.

The Counselor Activity Checklist was based on the activities a counselor normally performs in the Philadelphia schools. The three main items of information requested are

1. The amount of time actually spent on each activity,
2. The person with whom the activity occurred, and
3. The subject with which the activity was concerned.

For this evaluation, the relevant data consist of the changes, if any, that occurred in the number of contacts made for personal or academic reasons by the counselor over the pre- post-test interval.

17-5. RESULTS

Table 17-1 presents the mean number of contacts in each category for the pre-test and the post-test. Because the raw score distribution was skewed, each score was converted to its square root before the mean and variance were computed. From the table, it can be seen that counselors with aides significantly increased their contacts (for academic reasons) while a significant decrease took place for those without aides. Furthermore, those with aides did not evidence the same drop in number of personal contacts that those without aides encountered. Further statistical tests on the data were not deemed justified due to the shortness of the time interval between questionnaire administrations.

17-6. DISCUSSION

The evaluation method used gives results that are in accord with expectations and corroborate the value of the project. However, no attempt was made to match schools or counselors in the groups with and without aides; for example, the group without aides included counselors from District 8, which is not a poverty area. Nevertheless, the trends are clear - toward the year's end, many counselors become burdened with administrative matters so that their time for pupil counseling decreases. Counselors with aides seem to be able to avoid this decrease.

17-7. CONCLUSIONS

The primary strength of this project is in its apparent ability to relieve the counselor of some of the burden of routine clerical activities. However, the relationship between the statistics presented and any measureable change in the student has yet to be demonstrated.

17-8. RECOMMENDATIONS

The following recommendations are based on various comments made to FIRL and the Board of Education personnel by counselors and counselor aides and also on problems encountered in the evaluation.

Table 17-1. Means, Standard Deviations, and Significance Levels for the Number of Counseling Contacts

Type of Contact	Means*				Standard Deviation *		Number of Cases	
	Pre-test	Post-test	Difference	Probability	Pre-test	Post-test	Pre-test	Post-test
With Aides								
Academic	2.51	2.87	+0.36	<0.01	1.39	1.46	225	216
Personal	1.81	1.64	-0.170	Not Significant	1.38	1.10	225	216
Without Aides								
Academic	3.00	2.52	-0.480	<0.05	2.18	1.36	112	160
Personal	2.32	1.35	-0.970	<0.001	2.31	1.31	112	160

*Square-root transformations

1. Continue the project, since the data indicated that its goals are being met;
2. Prepare more adequate orientation for all concerned regarding the duties of a counselor aide;
3. Present more adequate orientation as to the need for project evaluation;
4. Establish clearer lines of administrative communications with regard to evaluation problems (for example, evaluation instruments were not administered or not returned due to the failure of administrative approval to reach the school principals); and
5. Examine the relationship between pupil effectiveness indices and utilization of the aide; thus, it might be possible to separate the schools as to the tasks on which the aides spend a majority of their time and relate this information to various demographic variables (such as pupil drop-out rates).

SECTION 18

PROJECT 17, EDUCATIONAL TECHNOLOGY

18-1. PROJECT DESCRIPTION

18-2. Objectives

The stated objectives of this project ("Application of Technology to Educational Practices to Individualizing Instruction") were as follows:

1. Improve pupil achievement by individualizing instruction in the basic academic subjects and skills of English, Reading, Social Studies, Mathematics, and Science;
2. Develop motivation, self-direction, and skills for independent learning; and
3. Increase the pedagogical skills of the participating teachers through team teaching.

18-3. Summary of Project

Beginning in the 1966-67 school year, 13 schools are to participate in the initial program; the composition and enrollment of these schools are as follows:

Level	*Grades*	*Number of Schools*	*Enrollment*
Elementary	K-6	4	3,700
Jr. High School	7-9	5	6,300
Sr. High School	10-12	4	15,200

The preceding schools are being modified to provide one larger room which will accommodate 100 or more pupils; and several rooms available for small discussion groups of 10 to 15 pupils.

Equipment and materials supplied for this program include

Amplifying systems for large rooms,

Film and filmstrip projectors, tape recorders, and record players for large rooms and for instructional materials center;

Television and television tape projector for large rooms;

Study cubicles for the instructional materials center;

Cubicles containing facilities for listening to tape and disc recordings, using head sets;

Cubicles for one to three pupils for looking at filmstrips and films (with head sets);

Furniture to house card catalogs listing all materials;

Duplicating devices to make overhead-projector transparencies and other needed materials;

Computer consoles;

A library of records, tapes, filmstrips, and films, catalogued with the books of the library;

Supplies for making overhead transparencies, charts, pictures, and the like; and

Programmed instruction materials.

After team teaching has been introduced on a small scale, present plans call for enlargement of the program as it becomes acceptable to other teachers. Some additional equipment, meaterials, and supplies will be needed as the program is enlarged.

By making both projectors and films more convenient, films and filmstrips will be used more often in many more classrooms.

A training program, consisting of four guest lectures and small group seminars, was conducted during August for 142 teaching and supervising personnel.

18-4. PROJECT EVALUATION

Because the substantive portion of this project did not begin during the term of the present contract, a formal evaluation of its effects on the children could not be conducted. However, it was possible to introduced an instrument designed to ascertain the attitudes of teacher-participants toward disadvantaged children and related matters. The results of this survey are presented with those for other Title I projects in Section 23 of this report. This instrument should be re-administered in the spring of 1967 to ascertain the extent of attitude change during the project.

18-5. RECOMMENDATIONS

The following recommendations are based on this year's observations:

1. Plan to post-test teachers at the end of the project.
2. Design an evaluation instrument to evaluate principals' attitudes toward scheduling changes that implementation of this program would necessitate; build the instrument around these points:

a. Flexibility of scheduling —
   - (1) Teacher control of scheduling
   - (2) Deviations from schedule
   - (3) Control of off-site activities

b. Role of master teacher —
   - (1) In selecting teachers in his program
   - (2) In controlling teachers in his program
   - (3) In evaluating teachers in his program

c. Relation to the rest of the curriculum

d. Benefits derived —
   - (1) Improved attitudes of child
   - (2) Improved learning of child
   - (3) Improved attitudes of parents/community
   - (4) Improved attitudes of teachers
   - (5) More effective training of teachers
   - (6) Better support for inexperienced teachers

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SECTION 19

PROJECT 18, CLOSED-CIRCUIT TELEVISION

19-1. PROJECT DESCRIPTION

19-2. Objectives

This project is designed to provide closed-circuit television to qualifying schools with the following stated objectives:

1. To improve and enrich the instruction of educationally deprived pupils; and
2. To instruct the teachers of these pupils in new content and methods.

It is hoped that the television medium will augment the teaching staff in the schools serving the educationally deprived pupils, and broaden the child's cultural horizons and improve skills through specially designed programs.

19-3. Summary of Project

During the 1965-66 school year, the School District of Philadelphia spent $773,000 of its own funds to develop preparatory programs for this project.

Thirty-four schools are being equipped for this program to begin with the 1966-67 school year. Each school is being equipped with an Ampex 7000 video-tape recorder with 60 hours of blank tape. The ratio of television sets in each school is being increased to one for every two or three classrooms. In addition, 24 schools have been equipped with a television camera. A Television Materials Assistant has been assigned to each school to set up and use the equipment, care for the tapes, and develop a tape library.

In each elementary school, 30 classrooms have been connected by closed circuit; 50 to 60 secondary-school classrooms are being similarly connected. The circuit connects each of these classrooms to the antenna and video-tape recorder.

The Television Materials Assistants and some professional personnel have been trained in the use of equipment and in techniques and application of television in the classroom by means of a training program designed by the Division of Instructional Materials, Radio-Television and Audio-Visual Education.

19-4. EVALUATION AND RECOMMENDATIONS

Because the program did not begin until the start of the 1966-67 school year, its effectiveness could not be tested during the present study.

A successful evaluation should not only compare classes having television with those not so equipped, but should include continuous usage figures, from which usage trends can be established. Because the medium is novel in the school, one expects much use the first year or two; however, continued use depends on how effectively the presentations promote learning among the children, or make the teacher's task easier without affecting the child adversely. This, in turn, depends on a strong and enthusiastic television staff, not only at the production end, but also at the viewing end. Thus, the teachers' use of television should be continuously monitored.

In any case, the prime question to be evaluated is not whether or not television raises learning curves overall, but in what content areas it offers learning opportunities not available with equal efficiency through other media. Thus, the evaluation should result in both a narrowing of content areas presented over television. through the elimination of inapplicable or irrelevant programs; and in a widening of other content areas as techniques in those areas are developed to peak efficiency.

SECTION 20

PROJECT 19, SUMMER SCHOOLS

20-1. PROJECT DESCRIPTION

20-2. Objectives

The stated objectives for this project were outlined for elementary pupils, secondary pupils, all pupils, and for teachers. The goals for the elementary pupils were to

1. Enable pupils to overcome deficiency in language arts and arithmetic, and
2. Enrich the experience of talented pupils by increasing power in creative written expression, by intelligent participation in science experience, and by developing facility in the new arithmetic.

For secondary pupils the goal was to enable each pupil to achieve, to the best of his ability, the specific objectives of the course or courses in which he enrolled, encompassing the knowledge, understanding, skills, attitudes, and appreciation set forth in the course of study guides and curriculum bulletins.

The goal for all pupils was to

1. Develop and improve their self-image,
2. Develop and increase cultural tastes and appetites, and
3. Develop an understanding and appreciation of the individual's role as a member of society and to stimulate him to action consistent with his developing principles.

The goals for teachers were to provide an opportunity for visiting student teachers to observe competent teachers in a school situation typical of disadvantaged areas and to provide actual teaching experience for interns who will be employed in similar Philadelphia schools in September, 1966.

20-3. Summary of Project

The appropriate courses of study were followed with adjustment for particular needs of the pupils, and with emphasis on remedial aspects. The enrichment aspects of language, science, and mathematics were given special emphasis and included creative writing, literature, and science.

Subjects covered included flight, life, water and space travel, microscopic studies, sound, electronics, botany, ancient animals and plants, mathematics, history, extension of base-ten generalization, number sets, geometry, interpretations of data, and graphing for elementary students.

Enrichment programs at the senior-high-school level were offered in English, mathematics, modern math, art, music, personal typing, and driver education.

For secondary pupils, the method of accomplishing the goals was to give courses in eight subject areas for weak achievers at the junior-high-school level; the areas were English, mathematics, social studies, science, remedial reading, instrumental and vocal music, foreign language, and introduction to business. Senior-high-school programs provided opportunity for review or makeup in English, foreign language, mathematics, science, and social studies and commerce.

In regard to all pupils, the method of accomplishing the project goals was for the teachers to be alert to opportunities for making the pupil aware of his ability and of his individuality. These opportunities included those that arose naturally and those that arose from contrived situations. Also, pupils visited and studied some of the historical and cultural attractions in the Philadelphia area. It was hoped that these experiences would open to the students new vistas of cultural interests. Also, by visiting places of historical and cultural interest, pupils were helped to see themselves not only as individuals but as members of society with roots in the past and extensions into the future, and with broad impact and interdependence in the present. Thus, an effort was made to inculcate in them a feeling of social responsibility.

The objectives for teachers were accomplished by providing one or more demonstration schools at each level, elementary, junior, and senior high. They were staffed with the best teachers in the city, excelling in subject ability and teaching skill. The pupils were drawn from the disadvantaged areas; thus student teachers were able to observe and practice with the aid and example of superior teachers, in school situations comparable to those in which they would later be employed.

20-4. EVALUATION METHOD

It was planned by the Board of Education project directors that summer school pupils, at the eighth-grade level, would be pre- and post-tested by the Stanford Achievement Test in appropriate areas, and that a log of activities and samples of creative writing and written reports would be kept. For secondary pupils, pre- and post-tests would be administered in appropriate areas using the Stanford Achievement Test. For all pupils, a scale to measure self-image would be administered, and records would be kept of historical and cultural attractions visited and studied. Teachers would make a log of personal observations. Key evaluation of the demonstration schools would be done through counting the number of observers accommodated and counting the number of interns served and the number later employed by the Board of Education for service in disadvantaged areas.

The total amount allocated for evaluating the summer-school project was $12,360. Seventeen schools were involved in the federally funded Summer School Project, making it economically impossible to sample the entire student body over all grades and subject areas of the 17 schools. Therefore, the following sampling procedures were set up:

Two elementary schools would be tested in the fifth grade only;

One junior high school would be tested in the eighth grade only; and

One senior high school would be tested in the eleventh grade only.

Because of problems with administration procedures, grade levels, and costs, it was decided to substitute Sequential Tests of Educational Progress (STEP) for the Stanford Achievement Tests. The Stanford Achievement Tests consist of several sub-tests printed in one booklet, so that it is necessary to write extensive supplementary administrative instructions to specify the appropriate sub-test and answer sheet for a specific course. The Stanford Achievement Tests covered grades four through nine, omitting the senior high grades. Use of the STEP tests avoided these problems because the sub-tests are printed in separate booklets by grade level, subject, and form with the same answer sheet used throughout. The STEP tests are available for grades four through first-year college.

A test to determine self-image was designed by FIRL, but was then recalled by the Board of Education. Therefore, a measurement of self-image was not made.

Each subject-matter group in each grade was considered as an independent sample for hypothesis testing. In each sample, the hypothesis that the pre-test and post-test means were no different was tested using a "t-test" for difference of means.

At the start of the summer-school session, Form 4A of STEP (Reading and Mathematics) was administered to the fifth grade in the two elementary schools; at the close of the summer-school session, the 4B forms of each test were administered.

In the eighth grade at one junior high school, Form 3A of STEP (Writing, Mathematics, Science, Social Studies and Reading) was administered as a pre-test in the appropriate classes; at the end of the session, the appropriate 3B form of the test was administered. Form 2A of STEP (Writing, Mathematics, Social Studies, Science, and Reading) was administered to the eleventh-grade students in one senior high school as a pre-test; the 2B form of the test was administered as a post-test.

20-5. RESULTS

Table 20-1 presents some descriptive parameters of the test instruments and the scores achieved by the sampled students. Tables 20-2 through 20-4 present data resulting from analysis of the scores.

Table 20-1. Test Instruments and Scores

Grade Level	Test*	Highest Possible Score †	Scores of Summer-School Students		
			Low	High	Mean ‡
Fifth	Mathematics 4A*	50	0	39	16
	Mathematics 4B	50	0	39	17
	Reading 4A	70	0	64	28
	Reading 4B	70	0	62	28
Eighth	Mathematics 3A	50	5	26	15
	Mathematics 3B	50	7	25	15
	Science 3A	60	9	40	18
	Science 3B	60	0	42	18
	Social Studies 3A	70	1	48	27
	Social Studies 3B	70	9	48	28
	Reading 3A	70	8	39	21
	Reading 3B	70	1	44	23
	Writing 3A	50	0	29	17
	Writing 3B	50	4	34	17
Eleventh	Social Studies 2A	70	0	54	26
	Social Studies 2B	70	11	56	28
	Science 2A	60	9	46	24
	Science 2B	60	3	46	25
	Mathematics 2A	50	2	45	19
	Mathematics 2B	50	6	49	21
	Writing 2A	60	0	49	25
	Writing 2B	60	0	45	21
	Reading 2A	70	0	65	28
	Reading 2B	70	0	64	33

*"A" forms of STEP tests given as pre-tests, "B" forms given as post-tests.

†Highest possible score is total number of items on the test.

‡Rounded off to whole numbers.

Table 20-2. *Pre- and Post-Test Scores and t-Ratios of Differences of Mean Scores*

Sample	Subject	Test (STEP)	Pre-Test*			Post-Test*			t-Ratio	Probability
			Mean	Standard Deviation	Number of Students	Mean	Standard Deviation	Number of Students		
			Fifth Grade							
1	Mathematics Review	Mathematics 4A,4B	15.91	6.84	105	16.82	6.90	104	0.945	NS
2	Language Arts Review	Reading 4A,4B	27.55	13.80	102	27.68	12.72	104	0.072	NS
			Eighth Grade							
3	General Mathematics and Algebra I	Mathematics 3A,3B	15.41	6.76	46	15.13	3.87	61	-0.270	NS
4	Science	Science 3A,3B	18.12	6.87	33	17.94	6.91	35	-0.105	NS
5	Social Studies	Social Studies 3A,3B	26.67	10.26	55	27.78	8.26	55	0.619	NS
6	Remedial Reading	Reading 3A,3B	21.17	7.52	24	22.92	10.42	25	0.659	NS
7	English	Writing 3A,3B	17.19	5.49	53	16.96	5.36	53	-0.213	NS
			Eleventh Grade							
8	American History	Social Studies 2A,2B	25.78	9.14	125	28.47	9.60	125	2.259	< 0.05
9	Physics	Science 2A,2B	27.24	7.64	46	27.13	9.21	46	-0.065	NS
10	Physical Science	Science 2A,2B	18.04	5.38	26	18.00	5.82	25	-0.024	NS
11	Science	Science 2A,2B	24.21	4.18	14	26.57	4.42	14	1.397	NS
12	Chemistry	Science 2A,2B	25.33	6.16	49	25.63	6.61	46	0.229	NS
13	Algebra II	Mathematics 2A,2B	16.94	6.37	85	19.16	5.76	86	2.379	< 0.05
14	Algebra II Review	Mathematics 2A,2B	16.18	6.54	17	22.72	9.69	36	2.478	< 0.05
15	Modern Mathematics	Mathematics 2A,2B	29.00	9.59	11	30.73	8.21	11	0.433	NS
16	Advanced Mathematics	Mathematics 2A,2B	25.40	5.16	10	26.60	4.25	10	0.539	NS
17	English 3 Review	Writing 2A,2B	25.12	9.59	43	19.98	10.31	51	-2.429	< 0.05
18	English 3 Review	Reading 2A,2B	27.18	17.58	45	33.27	13.87	51	1.877	NS
19	Speed Reading	Reading 2A,2B	51.00	8.62	6	55.43	7.17	7	0.930	NS
20	English 3 Advanced	Writing 2A,2B	24.13	8.13	15	18.62	8.53	21	1.895	NS
21	English 3 Advanced	Readin 2A,2B	24.59	19.25	17	18.52	7.40	21	-1.292	NS
22	English 3 Slow	Writing 2A,2B	24.55	9.84	56	22.53	9.96	68	1.123	NS
23	English 3 Slow	Reading 2A,2B	27.75	17.41	59	34.21	14.97	57	2.123	< 0.05

*Scores are raw scores; therefore,different tests (English, Mathematics) may not be compared.

Table 20-3. Pre- and Post-Test Scores with t-Ratios for Combined Groups in Eleventh Grade

Test (STEP)	Pre-Test			Post-Test			t-Ratio	Probability
	Mean	Standard Deviation	Number of Students	Mean	Standard Deviation	Number of Students		
Science	24.45	7.20	135	24.80	7.67	131	0.381	NS
Mathematics	18.60	7.78	123	21.46	7.88	143	2.959	< 0.01
Reading	28.22	18.17	127	32.52	15.36	136	2.069	< 0.05
Writing*	25.01	10.01	114	21.01	10.01	140	-3.143	< 0.01

*Includes the group of student's who refused to cooperate in taking the Writing post-test seriously.

Table 20-4. Analysis of Variance of Pre- and Post-Reading Scores of Federally Funded Elementary School versus *Non-Funded School*

Type of School	Pre-Test Reading Scores				Post-Test Reading Scores			
	Mean	Sum of Scores	Sum of Scores Squared	Number of Students	Mean	Sum of Scores	Sum of Scores Squared	Number of Students
Funded	25.00	1,425	46,389	57	23.98	1,367	39,647	57
Non-funded	30.49	1,433	52,241	47	31.83	1,528	57,130	48

Source	Degree of Freedom	Sum of Squares	Mean Square	F-Value	Probability
Between schools	1	2310.308	2310.308	13.663	<0.01
Between pre- post	1	0.429	0.429	0.003	-
Within cells	205	34665.393	169.098	-	-
Total	208	37048.104			

After the data from the pre- and post-tests were collected, the mean scores were examined to determine if the post-test score was sufficiently higher than the pre-test score to indicate that the students had definitely improved their skills in the subject measured by the test. A statistical calculation (called a "t-test") was made to determine if there is a significant difference between the pre- and post-test scores. Table 20-2 shows which tests indicated significant differences, and thus shows which groups of students made significant improvement in their summer-school studies.

As indicated in Table 20-2, only five groups showed significant differences in scores. Four of these were improvements in score, and one group was a significant decrease. The remaining groups showed no change; that is, the differences were so slight as to have no meaning.

All groups showing significant differences were from the eleventh-grade sample in the subject areas of American History, Algebra II, Algebra II Review, English 3 Review (negative change), and English 3S.

The hypothesis that there was no difference between pre- and post-test scores was tested by a one-way analysis of variance where the F-ratio computed was converted to a t-ratio. A probability level of 0.05 was used. The data are presented in Tables 20-2 and 20-3.

The goal of providing opportunities for visiting student teachers was met by accommodating 156 observers in the summer elementary, junior, and senior high schools.

20-6. DISCUSSION

Ideally, all sample groups would have shown significant gains in the post-test mean score over the pre-test mean score; this did not occur. For several reasons, it is not possible to conclude that this is because the summer-school session taught the students nothing. The data in Table 20-2 indicate that in several cases the post-test sample is larger than the pre-test sample for the same group. This supports the conjecture that new students came into the program after the pre-test and several days after the beginning of the session. Thus, a portion of the students received less instruction than the majority of the class; this may account for the lack of gain in the post-test score.

Another reason for lack of gains originates in the test instruments themselves. Each of the instruments consists of items covering several topic areas within the general area of the test. For example, the STEP Science 2A (for 10th through 12th grades) has items in the areas of Biology, Chemistry, Physics, Astronomy, Geology, and Meteorology. The total score of a student is a measure of his knowledge of all of these areas, whereas his summer-school course may have been only chemistry. Thus, his score may have improved on the chemistry items, but not on the remaining items of the test. A chemistry student's total score, then, consists of the sum of his performance on nine or ten chemistry items plus his performance on 49 or 50 items from the other areas in which he would not be expected to show improvement. Thus, the largest component of the chemistry student's total score is derived from his performance on non-chemistry items and the error variance of the non-chemistry items could easily outweigh the true variance of the chemistry items. Consequently, the total score on the Science test is not a valid measure of improvement in chemistry. This same argument could be presented for the students of physics and physical science.

Another reason for lack of gains might be that summer teaching for four to five weeks (in the case of elementary and junior high schools) or six to seven weeks (in the case of the senior high) did not provide sufficient remedial instruction for students to show gains in terms of total test scores on the test instruments designed to cover a three-year span. The solution to these problems would be to compute scores for students based only on the items closely related to the area of their summer-school study, rather than a score based on all items of the test.

Another way of interpreting the results is to postulate that the typical student retrogresses during the summer. Therefore, even if a group of summer-school students show no gain on the summer-school tests, they have maintained their level rather than regressed. These students will start the fall semester a step ahead of students who did not participate in summer school.

20-7. Score on Writing 2B

The significant loss on the writing post-test shown by the English 3 Review group was puzzling. The teacher, who was contacted to determine if any unusual circumstances were associated with this class, reported that these students were highly motivated and resented any interference with the course work. This group was given two tests — reading and writing; according to the teacher, the students were given the reading post-test followed by the writing post-test. The students so resented the loss of time (140 minutes for both tests) from their classwork that they refused to cooperate in taking the writing test seriously. Although this invalidates the writing-test data for this group, it is gratifying to have observed a rebellion motivated by the will to learn — evidence that, for this group of students, an ultimate goal of education had been accomplished.

20-8. Combined Groups

Table 20-3 presents the eleventh-grade data in combined groups for each of four tests. (Only one group took the Social Studies Test, so it was not included in this table.) The mathematics students, as a total group, made a gain in score significant at the 0.01 level; the students tested on the Reading Test made a gain significant between the 0.05 and 0.01 levels. The combined science-test groups failed to show a significant gain, while the loss shown on the writing test groups is not valid.

20-9. Elementary Schools

One of the two elementary schools tested was not a federally funded summer school. This was not known at FIRL until after the data analysis was completed. Since the two elementary schools did not receive the same treatment (the non-funded school did not have field trips and other activities), it is not possible to say that the samples of students from the two schools received the same treatment. The non-funded school may be considered a control school. The data for the elementary schools are presented in Table 20-4.

The analysis of variance shows a significant difference between the two schools — the non-funded school has higher scores on both the pre- and post-tests. (An exception to this is on the Mathematics 4A and 4B tests, where there was no significant difference between schools.) However, neither school shows a significant gain in the post-test score over the pre-test score.

20-10. CONCLUSIONS

If score gains serve as measures of the success of the project, the strengths of the project may be considered as those classes in which students exhibited the greatest positive score changes from the pre- to post-test. These classes are the eleventh-grade American History, Algebra II, Algebra II Review, and English 3 Slow (as measured by the reading test) classes. Outside of test scores, the strengths of the project are due to its presentation of activities and curricula to children to whom they would not have been available in the regular non-funded summer schools.

The weakness of this project evaluation was the shortness of the planning period. Because FIRL was not given adequate planning time, the sampling of programs and selection of measurement techniques was not optimized, and no program was established for collecting activity logs, writing samples, teacher observations, and records of trips.

20-11. RECOMMENDATIONS

Because of the short time available to the FIRL to plan the project evaluation, the recommendations resulting from the evaluation deal primarily with improvements in the evaluation procedures. No specific recommendations have arisen for the project except that it should be continued since there were indications of positive contributions.

The data collected from this year's summer school should be utilized in planning the evaluation of next summer's session. Information is now available on the number of students involved, the number of test booklets that will be necessary, and so forth.

It would also be desirable to complete an item analysis of the tests that were used this summer; this would test the expectation that although any variance produced by four weeks at a summer session may not be reflected in a total score change, significant improvement may be reflected by separate items which are relevant to a specific curriculum. An item analysis would also suggest which items of a test were the most valid with respect to content. From such an item analysis it would also be possible to see if certain types of items produced score changes more readily than other types, that is, to determine those areas in which the summer-school session was most successful in producing changes in achievement level.

It would also be beneficial if a more comprehensive sampling procedure could be set up. Such a procedure would sample all grades and schools but would not necessarily require complete testing of all students in the program.

SECTION 21

PROJECT 20, STIMULATE ACADEMICALLY TALENTED BOYS IN A CAMPUS ENVIRONMENT

21-1. PROJECT DESCRIPTION

This project was an attempt to stimulate a group of 36 academically talented boys by placing them in a campus environment (at Episcopal Academy) for a six-week summer school. A full program was offered which included not only academic work, but also swimming and other sports. The program was conducted by a staff of teachers from the Philadelphia Public Schools and Episcopal Academy.

21-2. Objectives

The stated objectives of this project project are

1. Improve academic skills and knowledge in reading, writing, spelling, oral and written expression, arithmetic, and science;
2. Foster basic physical skills, encourage participation and proficiency in sports, and develop habits and skills for worthy use of leisure time; and
3. Widen cultural horizons.

21-3. Summary of Project

The 35 boys who participated in this project were selected from poverty schools. The boys, ages 11 to 13, were bussed to the campus in the morning and had a full academic program with a considerable amount of individual attention. They were given lunch and in the afternoon had a full program of physical education.

The original project plan was to select boys with outstanding academic potential as revealed by a minimum I.Q. of 110 and seventh-grade reading ability. However, it was felt that the project would better serve as a demonstration project if boys with a wider range of abilities were included. Therefore, 25 percent of the boys selected had I.Q. scores between 80 and 95, 50 percent between 95 and 110, and 25 percent above 110. Reading levels of the selected group extended downward as far as the third grade. This ability range is more representative of the disadvantaged child.

21-4. EVALUATION METHOD

Because of the rather short duration of the project, it was not feasible to take pre-project and post-project measurements in every area of interest. Reading was selected as the most significant academic area and was used to measure the success of the project. The SRA reading program was used to provide an initial grade level and a final grade level for reading ability.

A physical education measure was also obtained through a modified AAU Physical Fitness Test that was given at the start of the project and repeated four weeks later. This test includes

Pull-ups,
Standing broad jump,
Fifty-yard dash,
Sit-ups,
Shuttle run,
Softball throw, and
Endurance run.

A point score is given for each event with a possible maximum of 70 points; 40 is considered passing.

The following additional pre-tests provided baseline data and guidance in the project:

Philadelphia I.Q.,
Otis I.Q. (verbal or non-verbal as required), and
Philadelphia Reading Level.

It has not been possible to retrieve the pre-test Stanford scores from the mass testing data in the time available. However, the data exist on tapes and retrieval programs are available.

Post-measures were taken in paragraph meaning and arithmetic computation (sub-tests of the Stanford Achievement Test) to establish final levels in these areas.

A record also was kept of the number of books taken from the library by each boy.

21-5. RESULTS

Scores from the various instruments are shown in Table 21-1. Reading gains for 35 boys in the SRA reading program are shown in Table 21-2. As may be seen from the table, the modal change of one grade level was achieved by about half the boys. Only four (11.4 percent) failed to show any gain. Seven (20 percent) improved two or more grade levels. No test of significance of group gains is possible with these data since the standard error of measurement is unknown.

The correlation between the Philadelphia I.Q. score and the reading gain is -0.29. This is not significantly different from zero, but suggests that there may be a tendency for the slower boys to profit most from

Table 21-1. Scores from Project 20 Instruments

Student No.	Philadelphia I.Q.	Otis I.Q.	Reading Level Reported	SRA Reading Level Pre-Test	SRA Reading Level Post-Test	Paragraph Meaning	Arithmetic-Computation	Physical Education Pre-Test	Physical Education Post-Test
1	113	B101 NV114 V95 T107	6+	3.6	5.0	5.4	5.6	38	41
2	120	B124	6	5.0	6.0	9.2	7.8	17	22
3	130	B108	8+	3.0	4.0	8.0	8.6	55	59
4	84	B83	4	3.5	5.5	2.4	7.4	34	33
5	-	B121	9.6	6.0	7.0	7.5	7.8	40	41
6	-	-	9.6	6.0	7.0	-	-	28	-
7	102	NV102 V98 T100	4	3.5	5.0	4.9	6.2	37	40
8	99	B99	6+	4.0	5.0	3.6	6.0	27	26
9	-	B120	10.0	6.0	7.0	10.0	10.5	57	48
10	102	NV99 V82 T89	6+	3.0	4.0	4.6	4.6	33	31
11	104	NV89 V100 T89	5	3.0	4.0	4.7	5.8	59	59
12	106	NV88 V89 T82	6+	4.0	6.5	6.5	6.0	51	45
13	104	B98	5+	3.0	3.0	3.9	4.6	36	39
14	-	-	6.6	5.0	6.0	7.0	6.6	56	-
15	96	NV96 V87 T92	6+	3.3	5.0	5.4	4.4	46	49
16	134	B120	6	4.0	5.0	9.2	6.8	47	53

Table 21-1. Scores from Project 20 Instruments (cont)

Student No.	Philadelphia I.Q.	Otis I.Q.	Reading Level Reported	SRA Reading Level		Paragraph Meaning	Arithmetic-Computation	Physical Education	
				Pre-Test	Post-Test			Pre-Test	Post-Test
17	110	B105	7+	4.0	5.0	5.0	5.2	35	48
18	103	B104	6	3.0	3.0	4.4	4.8	51	56
19	118	B112	6	4.0	4.0	6.0	5.9	57	49
20	102	NV102 V92 T100	5	2.6	4.0	6.2	5.8	43	43
21	108	B120	6	5.0	6.0	6.5	7.4	59	-
22	97	NV85 V91 T88	5	2.6	5.0	4.2	6.5	60	-
23	-	NV96 V111 T107	6.6	3.5	5.0	6.5	8.4	35	47
24	116	B112	6	4.0	5.0	7.7	6.3	24	27
25	84	B77	5+	2.6	5.0	4.2	3.8	43	49
26	85	B87	4	3.5	3.5	4.1	5.5	45	52
27	95	NV94 V89 T92	4+	2.3	4.0	4.0	5.2	64	63
28	-	NV111 V102 T110	8.9	4.0	6.5	7.0	9.1	56	57
29	115	B120	8	4.0	5.0	7.2	8.4	58	61
30	124	B117	7+	5.0	6.0	6.7	7.1	52	54
31	-	B114	7.7	5.0	6.0	10.4	6.5	9	12
32	-	NV112 V104 T112	7.4	4.5	7.5	8.7	6.5	32	46
33	-	B104	9.6	6.0	7.0	9.6	10.5	58	52
34	77	NV87 V89 T88	4	3.0	5.0	3.9	4.6	25	29
35	102	NV112 V103 T112	6	3.6	5.0	6.1	8.4	61	61

Table 21-2. Reading Gains for SRA Reading Program

Grade-Level Change	Frequency	Cumulative Percentage
0.0	4	100
1.0	17	89
1.4	3	40
1.5	2	31
1.7	2	26
2.0	2	20
2.4	2	14
2.5	2	9
3.0	1	3

Mean change = 1.27 grade levels.

the instruction. A larger sample or a more sensitive reading test would be required to confirm this hypothesis.

The mean improvement on the physical fitness test was 2.16 points. Twenty boys improved; eight did more poorly on the post-test. Three boys showed no change and four failed to take or complete the post-test. The improvement is significant at the 10 percent level but not at the 5 percent level, using the Wilcoxon Matched-Pairs Signed-Ranks One-Tailed Test.

21-6. DISCUSSION

21-7. Reading Program

The mean reading change of 1-1/4 grade levels should be compared to the amount of improvement to be expected in six weeks' time under normal instruction. If we assume 36 weeks of normal instruction in the school year, we would expect about 0.16 of a grade level improvement in six weeks'time. Thirty-one of the thirty-five students exceeded this value, which is significant at the 1 percent level (Chi Square Test). Thus, the project has effected significant improvement in reading. However, since the gains appear to be negatively correlated with the I.Q. scores, there is some doubt that the more able boys were as well motivated and/or as much benefited by the instruction as the less able boys. On the other hand, the staff may have had some inclination to give the less able boys more individual attention. Such a tendency would be natural under the circumstances and would probably explain the slight negative correlation; however we have no evidence on whether or not this occurred.

The four boys who failed to show improvement should be a matter of considerable concern. These constitute 11 percent of the sample, and for a monetary investment of this size, careful examination of the possible causes should be made. A comparison of their scores on the physical education trials shows that three of these boys showed a greater-than-mean gain while one showed considerable deterioration. The latter case was judged by the staff to be a leader in athletics (though very withdrawn in the classroom) so we would judge that his motivation for improvement was very low. Reports indicate that all of these boys like to draw attention to themselves, which possibly indicates psychological difficulty.

21-8. Physical Fitness Test

The overall gains in physical fitness were not notable in the four weeks between the tests. However, staff reports indicate a number of individual achievements, especially learning to swim in deep water. There was a tendency toward general improvement, but it should be a matter of concern that eight of the boys performed more poorly on the post-test. Possibly motivation was less in the post-test, but there is no assurance of this. The reliability of this test is unknown, so results must be interpreted with caution. The average of several administrations on successive days would make it possible to assess the reliability of the measure.

21-9. Free Reading

The boys were permitted to remove books from the library. The average number of books taken out was five, with a minimum of one and a maximum of fourteen. While some of the boys were probably not reading, it appears that many did.

21-10. CONCLUSIONS

The strength of this program derives from the amount of individual attention received by the boys. There can be little doubt that the boys profited from the experience. On the other hand, the fact that four boys (11 percent) failed to show improvement in reading, and an even larger number failed to improve in the physical education test, suggests that the expense of this kind of program is not warranted. The absence of significant correlation between ability and reading improvement (in fact there appears a slight inverse trend) suggests that even if the program had been confined to superior boys, the results would not have differed significantly.

21-11. RECOMMENDATIONS

While positive results were obtained in this program, the number of negative cases is such as to raise a question concerning the value of the program. This is a value judgment not easy to make, and is not for FIRL to decide. It would be a much easier decision to make if information about the subsequent performance of these boys is obtained. Therefore, it is recommended that a follow-up study should be made on these boys for at least one year (preferably two years) to determine their progress.

SECTION 22

MASS-TESTING PROJECT

22-1. PROJECT DESCRIPTION

22-2. Objectives

At the onset of the Title I Evaluation for the Philadelphia school system, it was decided that mass testing of a cross-section of students would prove beneficial. Such testing would not only provide the researchers with some baseline data on Philadelphia students, but also yield an indication of the relative strengths and weaknesses of various Title I schools and school districts within the city. By selecting nationally normed tests which had not previously been administered in Philadelphia, the additional option of ranking the Philadelphia schools on a national scale was obtained.

22-3. Summary of Project

To obtain a representative sample of students, it was decided to test all 4th-, 6th-, 8th-, and 12th-grade students in both public and parochial schools. The only restriction was that each school be entitled to receive Title I funds. Students from all but one of Philadelpha's eight school districts were included in the sample group.

To produce a multidimensional picture of Philadelphia students, three types of tests were selected.

The first type, achievement tests, were selected to measure each student's level of achievement in various academic subjects, according to his grade level. The subjects covered by these tests included spelling, reading, arithmetic, social studies, science, and grammar. In this category, the Stanford Achievement Tests (Harcourt, Brace, & World, Inc.) Intermediate I, Intermediate II, and Advanced Batteries, were given to grades 4, 6, and 8, respectively. The 12th grades took the Tests of Academic Progress (Houghton Mifflin Co.).

The second type of tests, aptitude tests, were administered on each level to measure proficiency in more general terms. Numerical reasoning and ability, clerical speed, mechanical reasoning, and space relations were among the areas covered. The School and College Ability Tests (Educational Testing Service) were administered to 4th-grade students, the Academic Promise Tests (The Psychological Corporation) to 6th-grade students, and both the 8th- and 12th-graders took the Differential Aptitude Tests (The Psychological Corporation).

Two different interest inventories were administered. The 4th-, 6th-, and 8th-grade students took the *What I Like to Do* Survey (Science Research Assoc., Inc.); this test was chosen to provide individual profiles of students' interests in various general areas. The Kuder Occupational Interest Survey (Science Research Assoc., Inc.) was administered to 12th-grade students to determine coincidence of occupational fields with student interests.

Before the actual testing began, a student identification code was developed jointly by FIRL and IBM-FSD personnel. This coding system was designed to facilitate the merger of all of a student's scores into one record, as well as to allow test results to be reported by district, school, homeroom, and sex. Following this code, each student was assigned a number designating his district, school, homeroom, sex, and seat number.

Testing for this phase of the Title I Evaluation was held during the last 2 weeks in May and the first 2 weeks in June. The tests were distributed and collected through the Department of Research and Development of the Board of Education and administered by teachers in the public and parochial schools.

During the summer, FIRL completed scoring the achievement and aptitude tests. IBM Federal Systems Division compiled student records on magnetic tape and printed summary reports of room, school, and district statistics for both separate and combined sexes. SRA scored and compiled reports on the two interest surveys and reported these directly to the Board of Education in the form of punched cards and class rosters for the *What I Like to Do* test and individual-score report rosters for the Kuder Occupational Interest Survey.

FIRL compiled conversion tables for the achievement and aptitude tests which present equivalent grade levels and/or percentile ranks for the various subtest scores. These tables are presented in Appendix 22-A (bound separately).

22-4. Changes

Score reports on the SRA instruments were reported directly to the Board of Education. FIRL contacted SRA during the summer to request reports on these instruments and were referred back to the Board of Education. These SRA reports were received by the Board of Education during the week of September 19. Therefore, none of the data from the SRA instruments was placed on the individual student tape records.

22-5. PROJECT EVALUATION

Instruments which have nationally based norms available were used (described under heading 22-3). The summary statistics from the Philadelphia Schools may be compared with these norms to determine the relative levels of achievement, aptitude, and interests of the Philadelphia student population.

22-6. RESULTS

Four magnetic tapes were compiled, one for each class tested, with individual records containing all mass-testing scores except those test scores by SRA.

Summary statistics for the achievement and aptitude tests are presented in seven volumes of computer printouts (copies were made) and supplied to the Board of Education under separate cover. These summary statistics include sample size, mean score and standard deviation for separate sexes, combined sexes, within each classroom, each school, and each district. Districts 1 through 7 represent the public schools; and districts 9 and 10 represent the parochial schools. The printouts are in volumes by test. The test statistics are presented for all rooms of a school, a school summary, rooms from the next school and its summary, until data from all schools for a district are presented; then district summaries are presented. Summary statistics for the entire sample population have been computed and entered manually on the printouts.

22-7. DISCUSSION

The purpose of the project was to determine population parameters for Philadelphia on nationally standardized test instruments. The data collected are subject to interpretation by the Philadelphia Board of Education. FIRL has not attempted to calculate any inferrential statistics from the data, but has provided normative tables in an appendix from which grade levels and/or percentile scores may be obtained.

22-8. CONCLUSIONS

The major significance of the data is that it is the first time Philadelphia students have been tested at several grade levels on nationally standardized instruments, thus facilitating a comparison of Philadelphia students' performances with national norms.

Only schools eligible for Title I funds were tested and thus the sample tested is not representative of the population of Philadelphia students. This has introduced a bias in the scores — the sample scores are likely to be lower than the true population means.

All the tests which were scored locally were recorded on magnetic tape with a record for each child. The two interest tests were scored by SRA and no magnetic-tape record was supplied; however, punched cards containing *What I Like to Do* scale scores and student's ID and name were supplied. None of the SRA data has been added to the individual student tape records because the tapes were completed before the SRA data were received.

22-9. RECOMMENDATIONS

The following recommendations are based on the preceding conclusions:

1. Repeat this program each year so that score trends and growth can be determined.
2. Use sampling procedures so that the parameters of the total population can be estimated more economically.
3. Make current mass-testing data available to school guidance personnel for evaluation of individual students.
4. Implement as soon as possible a student numbering system which will provide a unique, permanent number for each student, thereby facilitating data retrieval (including test scores).

SECTION 23
ACROSS-PROJECT EVALUATION
(TITLE-I SURVEY)

23-1. INTRODUCTION

It is widely assumed that teachers' attitudes toward their pupils are reflected in the academic and attitudinal performance of the student. That is, if the student perceives that he is disliked or felt to be inferior by his teacher, he will respond in such a way as to justify this feeling — a self-fulfilled prophecy. Thus, an indirect objective of many Title I projects was to improve teacher attitudes toward the disadvantaged child. The Title I Survey was an initial attempt to measure these attitudes.

This survey was designed to assess the teachers' attitudes toward the following things:

1. The disadvantaged child. For example, *It is about time somebody did something to help the disadvantaged child.*
2. The Title I project in which the respondent participated. For example, *My project is amenable to objective evaluation.*
3. The theory and philosophy of Title I. For example, *The Title I projects are generally a waste of the taxpayers' money.*

Additionally, seven statements were included which related only to the school-community coordinator project.

Each statement was scored on a 1-through-5 scale, with 1 representing the most positive and socially acceptable response (whether "strongly agree" or "disagree"). Means for each item were then computed by project; these figures provide the basic data on which the following results are based.

23-2. RESULTS

Overall

Table 23-1 presents the ranking of the projects according to the mean response (summed over questions) of the respondents. The senior-high mathematics teachers, those involved in the K-4-4-4 project, and the junior-high mathematics teachers have somewhat unfavorable attitudes, whereas those involved in the art project or the school-community coordinators have more favorable attitudes. Also significant is the negative shift (from 2nd to 14th) of the attitudes of those involved in the Educational Improvement Project (project 3). However, overall means

Table 23-1. Overall Rank and Means of Title-I Projects Surveyed

Rank	Project Number	Project	Mean
1	10	Art	2.37
2	7	School-Community Coordinators	2.42
3	3	Educational Improvement Project, Pre-Test	2.44
4.5	3	Child Study	2.45
4.5	13	Foreign Language	2.45
6	1	Speech Improvement	2.46
7	3	New Teachers, Post-Test	2.47
8	3	New Teachers, Pre-Test	2.49
9.5	8	Massive Basic Skills	2.50
9.5	4	Vocational Skills	2.50
11	3	Elementary Mathematics	2.53
12	15	Academically Talented/Potentially Able Students	2.55
13	17	Individual Instruction	2.56
14	3	Educational Improvement Project, Post-Test	2.59
15	3	New Mathematics, Junior High	2.61
16	3	Educational Improvement Project, K-4-4-4	2.62
17	3	New Mathematics, Senior High	2.69

are informative only when examined in the context of the individual-statement statistics; these are presented under the following heading and in Appendix A-23.

Individual Questions

In order to assess the significance of the differences between projects on each statement, New Duncan Multiple Range tests (Duncan, 1955) were computed. (The detailed results of these tests are given in Appendix 23-A.) The results clearly indicate that, with one or two exceptions, the statements discriminate between projects. This discrimination suggests that the participants in some projects have an enthusiasm that benefits the project. The results of the individual evaluations (Sections 2 through 22 of this report) support this suggestion.

Significant polarizations of attitudes toward each statement are summarized in Table 23-2.

23-3. DISCUSSION

While the significant differences between means of groups provide one element of information, the *ordering* of groups for each statement is also significant. The results described here are suggestive; however, they can be considered valid only when they relate to pupil performance. Such a relationship has not been demonstrated in the present data, because few projects dealt with pupils for any length of time

23-4. CONCLUSIONS AND RECOMMENDATIONS

In summary, the results of the Title I Survey would suggest that, with some refinement and further validation against pupil performance, it may serve as a predictor of project success, and as a method for selecting teacher-participants. Such a result, while highly desirable, must depend on further statistical studies into the reliability and validity of the survey.

Therefore, the primary recommendation based on the Title I results is to examine the relationship of the survey to pupil success over a prolonged period.

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*Duncan, David B., "Multiple Range and Multiple F Tests," Biometrics, March, 1955.

Table 23-2. Participants in Title I Projects Who Agreed or Disagreed Most with Statements on Title I Survey

Note: Participants listed below either agreed or disagreed most unless otherwise noted in Comment column.

Statement	Participants who Agreed Most or Disagreed Least with Statement	Participants who Disagreed Most or Agreed Least with Statement	Comment
1. I am a teacher who willingly elects to teach disadvantaged children.	3 (EIP pre-test[a])	3 (sr. high math; EIP post-test[a])	[a] EIP showed significant negative pre- post-test shift.
2. My project is amenable to objective evaluation.	3 (elem. math; and child study), 1, 4, 8	3 (sr. high math; new teachers pre- and post-test)	-
3. My project is especially effective in reducing the educational gap between the disadvantaged child and the middle class school child.	3 (EIP pre-test[b]), 4, 8, 10, 13	3 (sr. high math; EIP post-test[b])	[b] EIP showed significant negative pre- post-test shift.
4. It takes an exceptional teacher to willing elect to teach disadvantaged children.	3 (K-4-4-4), 8, 10	13	-
5. There has been entirely too much time taken up with testing in my project.	3 (K-4-4-4; EIP pre-test), 17	13	-
6. The children in my school or class are unlikely to be helped by the Title I projects.	3 (jr. and sr. high math)	4, 8, 10	-
7. The Title I project that I am participating in, was carefully and thoughtfully conceived.	3 (elem. math; child study), 10, 13	3 (EIP post-test), 4, 15	-
8. The people who wrote the Proposal for the Title I that I am involved with have had little contact with the disadvantaged child.	3 (sr. high math), 10	3 (new teachers, pre- and post-test; child study)	-
9. One severe problem with my project is that it has not been well integrated with the other projects.	1, 8, 17	10	-

Table 23-2. Participants in Title I Projects Who Agreed or Disagreed Most With Statements on Title I Survey (cont)

Statement	Participants who Agreed Most or Disagreed Least with Statement	Participants who Disagreed Most or Agreed Least with Statement	Comment
10. The Title I projects are, generally, a waste of the taxpayers' money.	3(junior and senior high math; K-4-4-4; EIP post-test)[c], 8[c]	1, 10	[c]Disagreed least
11. The people in the disadvantaged areas have not yet done enough for themselves.	3(junior and senior high math), 4, 10	1, 7, 8	-
12. My project is likely to have more of an impact on the teacher than on the child.	3(senior high math)	4, 10	-
13. Title I money could be put to better use elsewhere in the educational system.	3(EIP post-test; junior high math), 13	4, 10	-
14. All these disadvantaged children need is a little extra help and encouragement	4, 10	8	-
15. It will be several years, at least, before the fruits of my project make a significant difference as far as the children are concerned.	3(K-4-4-4; junior high math; EIP post-test), 4, 8, 17	10	-
16. Given time, the Title I programs will be successful in reducing the educational gap between the disadvantaged child and the middle class school child.	10	3(EIP post-test; senior high math)	-
17. It is about time somebody did something to help the disadvantaged child.	8, 10	3(EIP post-test; senior high math)	[d]Agreed least; EIP showed significant negative pre- post-test shift.

Table 23-2. Participants in Title I Projects Who Agreed or Disagreed Most with Statements on Title I Survey (cont)

Statement	Participants who Agreed Most or Disagreed Least with Statement	Participants who Disagreed Most or Agreed Least with Statement	Comment
18. The people in charge of my project do not have a clear idea of the way in which their ideas are being implemented.	3(EIP post-test[e]; senior high math; K-4-4-4), 17	10, 13	[e] EIP showed significant negative pre- post-test shift.
19. Title I money could best be utilized as a means of enlarging already existing programs.	3(elementary math; EIP pre-test) 4, 15	1, 8, 13, 17	-
20. The Title I emphasis on the disadvantaged child is likely to be detrimental to the middle class child	3(junior and senior high math; child study; K-4-4-4)	1, 3(new techniques pre- and post-tests; EIP pre-test), 7, 10, 13	-
21. The results of my project will be relevant only to the disadvantaged child.	-[f]	All[f]	[f] Lowest mean score was 3.8.
22. Without the full cooperation of the parents, the Title I projects are unlikely to help the disadvantaged child.	3(elementary and senior high math; child study), 10	3(EIP pre-test), 4	-
23. The disadvantaged child deserves special attention and extra benefits.	3(EIP pre-test and child study), 7	3(new teacher pre-test; EIP post-test; K-4-4-4)[g], 4[g]	[g] Agreed least.
24. My Title I project will be of more benefit to the middle class child than to the disadvantaged child.	3(senior high math)	3(new teacher pre- and post-test; EIP pre-test), 10, 13	-
25. Title I money should be used to raise the salaries of teachers of the disadvantaged above the going rate in other schools.	h	h	[h] Responses of all groups generally neutral but oriented slightly toward disagreement side.

Table 23-2. *Participants in Title I Projects Who Agreed or Disagreed Most with Statements on Title I Survey (cont)*

Statement	Participants who Agreed Most or Disagreed Least with Statement	Participants who Disagreed Most or Agreed Least with Statement	Comment
26. The disadvantaged child deserves special attention and extra benefits.	10	3(new teacher pre- and post-test EIP post-test)[i], 4[i], 17[i]	[i] Agreed least.
27. My project could best be utilized by incorporating it into an already existing program.	3(elementary math; EIP pre-test)[j]	4, 8, 10, 13	[j] Disagreed least.
28. If the community group in the disadvantaged area would do more to upgrade themselves, there would be no need for the Title I projects.	13	1	-
29. The disadvantaged child for whose benefit Title I money is being used is uneducable.	3(K-4-4-4; senior high math)[k], 14[k]	1, 10	[k] Disagreed least.
30. My project, to a large extent, is offsetting the effects of poor environment for the disadvantaged child.	1, 10, 13	3(EIP pre- and post-tests)[l]	[l] Agreed least.
31. The school can, to a large extent, offset the effects of poor environment.	13	3(child study; junior and senior high math)[m]	[m] Tendency toward neutral point.
32. The children in my school need more discipline and less concern with academic programs.	3(K-4-4-4; junior high math), 8	7, 10	-
33. My project is failing in reaching the goals outlined for it.	1, 3(EIP pre- and post-tests; new teachers post-test; K-4-4-4)	4, 10, 13	-

Table 23-2. Participants in Title I Projects Who Agreed or Disagreed Most with Statements on Title I Survey (cont)

Statement	**Participants who Agreed Most or Disagreed Least with Statement**	Participants who Disagreed Most or Agreed Least with Statement	Comment
34. The schools cannot provide a solution to all of society's ills.	3(elementary, junior and senior high math), 7, 8, 13, 15	3(EIP pre-test)[n], 10[n]	[n] Agreed least.
35. The chief advantage of my project is its concern with academic programs.	3(senior high math)	4, 10[o]	[o] Agreed least.
36. Most teachers who are participating in Title I projects are primarily interested in the extra compensation.	3(K-4-4-4; senior high math)[p], 17[p]	3(elementary math), 4, 7, 10	[p] Disagreed least.
37. The Federal Government should not suggest programs for the disadvantaged, but simply provide the money and let local authorities decide in what way it is to be spent.	3(EIP pre- and post-tests; K-4-4-4), 10, 15	1	-
38. Before the Title I programs were written, the school administration should have conferred more with the teachers in the disadvantaged areas.	1, 3(junior high math; K-4-4-4), 13, 15, 17	10	-
39. Programs to help the disadvantaged child should be the exclusive responsibility of local school authorities.	3(new teachers post-test), 4, 15	1, 3(senior high math), 10, 13	-
40. The Title I projects are basically a waste of time.	3(junior and senior high math; EIP post-test; new teachers post-test)[q], 17[q]	10	[q] Disagreed least.
41. As a result of the School-Community Coordinator's work, community understanding of the school has improved.	3(EIP pre-test), 7	3(EIP post-test; junior and senior high math; K-4-4-4)[r]	[r] Agreed least.

Table 23-2. Participants in Title I Projects Who Agreed or Disagreed Most with Statements on Title I SUrvey (cont)

Statement	Participants who Agreed Most or Disagreed Least with Statement	Participants who Disagreed Most or Agreed Least with Statement	Comment
42. As a result of the School-Community Coordinator's work, parents are more responsive to teacher's inquiries and requests.	3(child study; EIP pre-test), 7, 13	3(K-4-4-4; senior high math)^{s}, 8^{s}, 10^{s}	^{s}Agreed least.
43. Community opinion of the school has improved due to the School-Community Coordinator's work.	3(child study; EIP pre-test), 7	3(EIP post-test; senior high math)^{t}, 8^{t}, 10^{t}	^{t}Agreed least; EIP showed significant negative pre-post-test shift.
44. Student attitudes toward school have improved due to the School-Community Coordinator's work.	3(EIP pre-test; child study), 7	3(K-4-4-4; senior high math)^{u}, 8^{u}, 10^{u}	^{u}Agreed least.
45. As a result of the School-Community Coordinator's work, the school's understanding of the community has improved.	3(EIP pre-test; child study; new teachers pre- and post-tests), 7	1^{v}, 3(K-4-4-4; senior high math)^{v} 10^{v}, 17^{v}	^{v}Agreed least.
46. As a result of the School-Community Coordinator's work, parents have provided better home environments for their school-aged children, particularly, better environments for school work.	1, 3(EIP pre-test)^{w}	3(junior and senior high math)^{w}, 10^{w}	^{w}All responses clustered around 3 (neutral point).
47. As a result of the School-Community Coordinator's work, pupils and parents have been more cooperative with the school.	3(child study; EIP pre-test), 7	3(junior and senior high math; K-4-4-4)^{x}, 10^{x}	^{x}Agreed least.

APPENDIX 23-A

RANKS, MEANS, AND SIGNIFICANT DIFFERENCES OF PROJECT-PARTICIPANTS' RESPONSES TO STATEMENTS IN TITLE I SURVEY

Each statement on the Title I Survey was responded to by participants in 17 Title I projects and subprojects on a 1-through-5 scale, with 1 indicating the strongest agreement with the statement and 5 the strongest disagreement with the statement.

In the tables which follow for each statement, projects are ranked on the basis of the mean of responses. The lines to the right of the means indicate the extent to which any given project group is significantly different (at the 5-percent level) from all others; thus, any two means covered by the same line are *not* significantly different, and any two means not covered by the same line *are* significantly different.

The following projects are ranked in the individual-statement tables:

Number	*Title*	*Number of Questionnaire Respondents**
1	Speech Improvement Staff Development	69
3a-E	New Mathematics for Elementary Teachers	608
3a-J	New Mathematics for Junior High School Teachers	220
3a-S	New Mathematics for Senior High School Teachers	122
3b	Child Study Project	245
3c-Pre	New Teachers, Pre-Test	401
3c-Post	New Teachers, Post-Test	436
3d-Pre	Educational Improvement Project, Pre-Test	463
3d-Post	Educational Improvement Project, Post-Test	473
3e	Orientation to K-4-4-4	224
4	Development of Salable Vocational Skills	92
7	School-Community Coordinator Service for Schools Situated in Disadvantaged Areas	198
8	Massive Program to Upgrade Achievement in Basic Skills for Educationally Handicapped Pupils	44
10	Innovative Program Providing Art Teachers for the Education of the Disadvantaged Child on the Elementary Level	11
13	Audio-Lingual Curriculum in French and Spanish in Seventh Grade	28
15	Classes for Academically and Potentially Able Students	511
17	Application of Technology to Educational to Individualizing Instruction	128

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*Every respondent did not answer every statement; thus the number may vary slightly for individual statements.

Statement 1. I am a teacher who willingly elects to teach disadvantaged children.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)							
1	10	1.55	│							
2	7	1.60	│	│						
3	3d-Pre	1.60	│	│						
4	3b	1.61	│	│						
5	3c-Post	1.70	│	│	│					
6	3c-Pre	1.74		│	│					
7	1	1.75		│	│	│				
8	13	1.75		│	│	│				
9	15	1.76		│	│	│				
10	4	1.84			│	│	│			
11	3a-E	1.91				│	│	│		
12	3a-J	1.98				│	│	│	│	
13	8	2.02					│	│	│	
14	3d-Post	2.05						│	│	│
15	17	2.16							│	│
16	3e	2.23								│
17	3a-S	2.56								

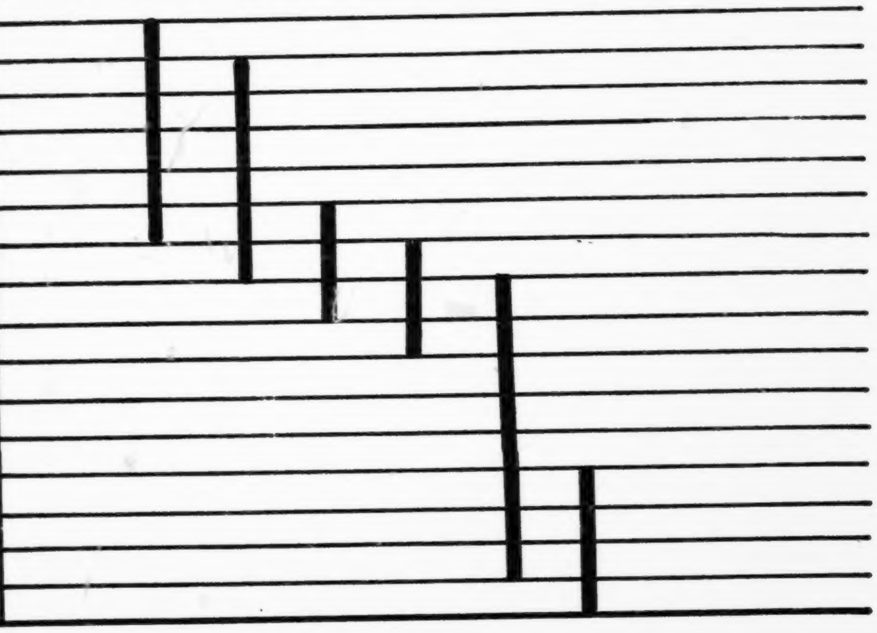
Statement 2. My project is amenable to objective evaluation.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					
1	4	1.85	│					
2	3b	1.91	│	│				
3	3a-E	1.94	│	│	│			
4	8	1.95	│	│	│			
5	1	1.97	│	│	│			
6	10	2.00	│	│	│	│		
7	3d-Pre	2.03		│	│	│	│	
8	7	2.05		│	│	│	│	
9	3e	2.05		│	│	│	│	
10	3a-J	2.10			│	│	│	│
11	15	2.13				│	│	│
12	3d-Post	2.18					│	│
13	13	2.19					│	│
14	17	2.20					│	│
15	3c-Pre	2.21					│	│
16	3a-S	2.21					│	│
17	3c-Post	2.23						│

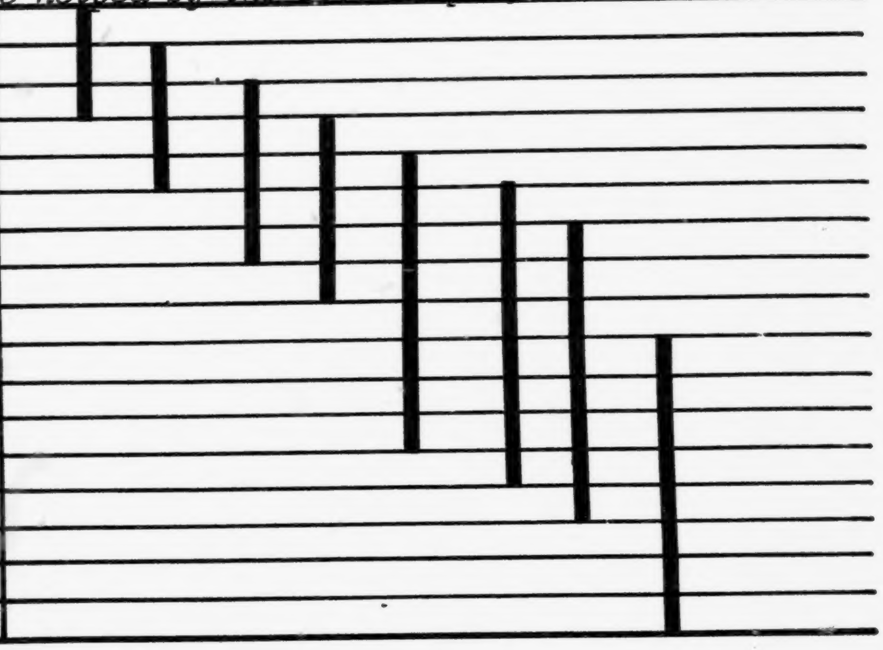
Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)							
Statement 3. My project is especially effective in reducing the educational gap between the disadvantaged child and the middle class school child.										
1	8	1.95	│							
2	13	1.96	│	│						
3	3d-Pre	2.00	│	│	│					
4	4	2.07	│	│	│	│				
5	10	2.09	│	│	│	│	│			
6	1	2.12		│	│	│	│	│		
7	3b	2.12			│	│	│	│	│	
8	17	2.22				│	│	│	│	
9	3a-E	2.24				│	│	│	│	
10	3e	2.25				│	│	│	│	
11	3d-Post	2.25				│	│	│	│	
12	7	2.26					│	│	│	
13	15	2.30						│	│	
14	3c-Pre	2.33							│	
15	3c-Post	2.37							│	
16	3a-J	2.39							│	
17	3a-S	3.25								
Statement 4. It takes an exceptional teacher to willingly elect to teach disadvantaged children.										
1	10	2.27	│							
2	8	2.36	│	│						
3	3e	2.37	│	│						
4	3b	2.44	│	│	│					
5	4	2.51		│	│	│				
6	7	2.52		│	│	│				
7	3a-J	2.52		│	│	│				
8	3a-S	2.54		│	│	│	│			
9	3a-E	2.56		│	│	│	│	│		
10	3d-Post	2.63			│	│	│	│		
11	1	2.71				│	│	│	│	
12	15	2.75				│	│	│	│	
13	17	2.80					│	│	│	│
14	3d-Pre	2.81						│	│	│
15	3c-Pre	2.92							│	│
16	3c-Post	3.06								│
17	13	3.43								

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)

Statement 5. There has been entirely too much time taken up with testing in my project.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)
1	13	1.68	
2	1515	1.96	
3	3a-S	2.02	
4	3c-Post	2.04	
5	10	2.09	
6	4	2.09	
7	3c-Pre	2.13	
8	7	2.18	
9	3d-Post	2.31	
10	3a-E	2.34	
11	8	2.39	
12	ea-J	2.40	
13	1	2.43	
14	3b	2.49	
15	3e	2.51	
16	17	2.52	
17	3d-Pre	2.67	

Statement 6. The children in my school or class are unlikely to be helped by the Title I projects.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)
1	10	1.45	
2	4	1.52	
3	8	1.66	
4	15	1.72	
5	7	1.80	
6	3d-Pre	1.86	
7	13	1.89	
8	1	1.91	
9	3d-Post	1.98	
10	3b	2.02	
11	17	2.03	
12	3a-E	2.05	
13	3c-Pre	2.08	
14	3e	2.13	
15	3c-Post	2.25	
16	3a-J	2.27	
17	3a-S	2.27	

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)							
Statement 7. The Title I project that I am participating in was carefully and thoughtfully conceived.										
1	3a-E	1.85	│							
2	13	1.86	│							
3	3b	1.88	│							
4	10	1.91	│							
5	3a-J	2.20		│						
6	1	2.22		│						
7	3d-Pre	2.26		│						
8	8	2.30		│						
9	7	2.37		│	│					
10	3a-S	2.44			│	│				
11	3c-Pre	2.46			│	│				
12	17	2.52			│	│	│			
13	3e	2.54			│	│	│	│		
14	4	2.57			│	│	│	│		
15	3c-Post	2.64				│	│	│		
16	3d-Post	2.73					│	│		
17	15	2.75						│		
Statement 8. The people who wrote the Proposal for the Title I that I am involved with have had little contact with the disadvantaged child.										
1	3c-Pre	2.11	│							
2	3b	2.25	│	│						
3	3c-Post	2.27	│	│	│					
4	13	2.41		│	│	│				
5	3c-Pre	2.46			│	│	│			
6	1	2.43				│	│	│		
7	8	2.52				│	│	│	│	
8	3a-E	2.58				│	│	│	│	│
9	17	2.65					│	│	│	│
10	3d-Post	2.68						│	│	│
11	3e	2.71							│	│
12	4	2.71							│	│
13	7	2.74								│
14	3a-J	2.76								│
15	15	2.79								│
16	10	3.00								
17	3a-S	3.09								

Statement 9. *One severe problem with my project is that it has not been well integrated with the other projects.*

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)				
1	10	1.82					
2	3a-S	2.43	|				
3	4	2.54	|	|			
4	3a-E	2.60	|	|	|		
5	3c-Post	2.61	|	|	|		
6	3c-Pre	2.62	|	|	|		
7	3b	2.71		|	|	|	
8	7	2.72		|	|	|	
9	15	2.74			|	|	
10	3d-Pre	2.75			|	|	
11	3e	2.78			|	|	
12	13	2.02				|	
13	3a-J	2.82				|	
14	3d-Post	2.82				|	
15	17	2.89				|	|
16	1	2.90				|	|
17	8	3.05					|

Statement 10. *The Title I projects are, generally, a waste of the taxpayers' money.*

1	10	1.45	|					
2	1	1.55	|	|				
3	3b	1.69		|	|			
4	15	1.69		|	|			
5	4	1.70		|	|			
6	3d-Pre	1.72		|	|	|		
7	3a-E	1.72		|	|	|		
8	17	1.73		|	|	|		
9	7	1.74		|	|	|		
10	13	1.75		|	|	|	|	
11	3c-Post	1.78			|	|	|	
12	8	1.80			|	|	|	|
13	3c-Pre	1.83			|	|	|	|
14	3a-J	1.92				|	|	|
15	3e	1.92				|	|	|
16	3d-Post	1.95					|	|
17	3a-S	2.02						|

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Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					

Statement 11. The people in the disadvantaged areas have not yet done enough for themselves.

Rank	Project	Mean						
1	1	2.84	│					
2	7	2.94	│	│				
3	8	3.02	│	│	│			
4	3c-Post	3.04	│	│	│			
5	3c-Pre	3.07		│	│			
6	13	3.07		│	│			
7	3d-Pre	3.08		│	│			
8	3d-Post	3.11		│	│	│		
9	3b	3.14		│	│	│		
10	15	3.16			│	│		
11	3e	3.20			│	│	│	
12	17	3.22			│	│	│	│
13	3a-E	3.23			│	│	│	│
14	3a-S	3.24			│	│	│	│
15	3a-J	3.35				│	│	│
16	4	3.41					│	│
17	10	3.45						│

Statement 12. My project is likely to have more of an impact on the teacher than on the child.

Rank	Project	Mean					
1	10	1.91	│				
2	4	1.97	│				
3	15	2.17					
4	7	2.41					
5	3d-Pre	2.68		│			
6	17	2.78		│	│		
7	1	2.83		│	│		
8	3a-E	2.86		│	│		
9	3d-Post	3.86		│	│		
10	3e	2.87		│	│	│	
11	13	2.89		│	│	│	
12	8	2.91		│	│	│	│
13	3c-Pre	2.99			│	│	│
14	3c-Post	3.00			│	│	│
15	3a-J	3.10				│	│
16	3b	3.17					│
17	3a-S	3.56					

Statement 13. Title I money could be put to better use elsewhere in the educational system.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)			
1	10	1.55				
2	4	1.81				
3	3a-E	2.01	|			
4	3d-Pre	2.05	|			
5	3b	2.06	|			
6	7	2.07	|			
7	1	2.09	|			
8	17	2.15	|	|		
9	3e	2.16	|	|		
10	8	2.16	|	|		
11	15	2.16	|	|	|	
12	3c-Pre	2.19	|	|	|	
13	3c-Post	2.32	|	|	|	
14	3d-Post	2.32		|	|	|
15	3a-J	2.37			|	|
16	13	2.43				|
17	3a-S	2.46				|

Statement 14. All these disadvantaged children need is a little extra help and encouragement.

1	8	2.27				
2	3b	2.56	|			
3	17	2.56	|			
4	3d-Post	2.57	|			
5	3d-Pre	2.64	|	|		
6	3e 3e	2.71	|	|		
7	1	2.71	|	|		
8	13	2.81	|	|	|	
9	3a-J	2.82	|	|	|	
10	3c-Pre	2.90		|	|	
11	15	2.99			|	
12	3a-S	2.99			|	
13	3c-Post	3.00			|	
14	3a-E	3.01			|	
15	7	3.06			|	
16	4	3.70				|
17	10	4.00				|

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)				

Statement 15. It will be several years, at least, before the fruits of my project make a significant difference as far as the children are concerned.

1	10	2.55					
2	15	2.98	│				
3	3c-Pre	3.01	│	│			
4	7	3.04	│	│			
5	3a-S	3.09	│	│	│		
6	3a-E	3.09	│	│	│		
7	1	3.14	│	│	│	│	
8	3c-Post	3.16	│	│	│	│	
9	13	3.18		│	│	│	│
10	3d-Pre	3.24		│	│	│	│
11	3b	3.29			│	│	│
12	4	3.30			│	│	│
13	17	3.37				│	│
14	3e	3.38					│
15	3a-J	3.42					│
16	3d-Post	3.51					│
17	8	3.52					│

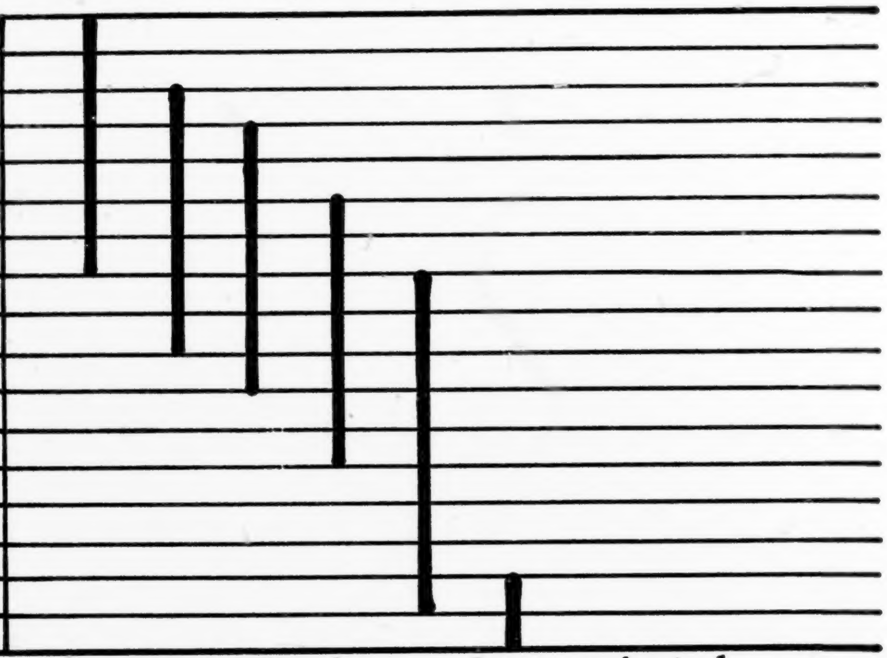
Statement 16. Given time, the Title I programs will be successful in reducing the educational gap between the disadvantaged child and the middle class school child.

1	10	1.55				
2	13	1.79	│			
3	3b	1.81	│			
4	8	1.82	│			
5	3a-E	1.83	│			
6	7	1.83	│			
7	3d-Pre	1.84	│	│		
8	15	1.89	│	│		
9	3c-Pre	1.90	│	│		
10	4	1.91	│	│	│	
11	17	1.94	│	│	│	
12	1	1.96	│	│	│	
13	3e	1.96	│	│	│	
14	3c-Post	2.05		│	│	
15	3a-J	2.05		│	│	
16	3d-Post	2.08			│	│
17	3a-S	2.25				│

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)

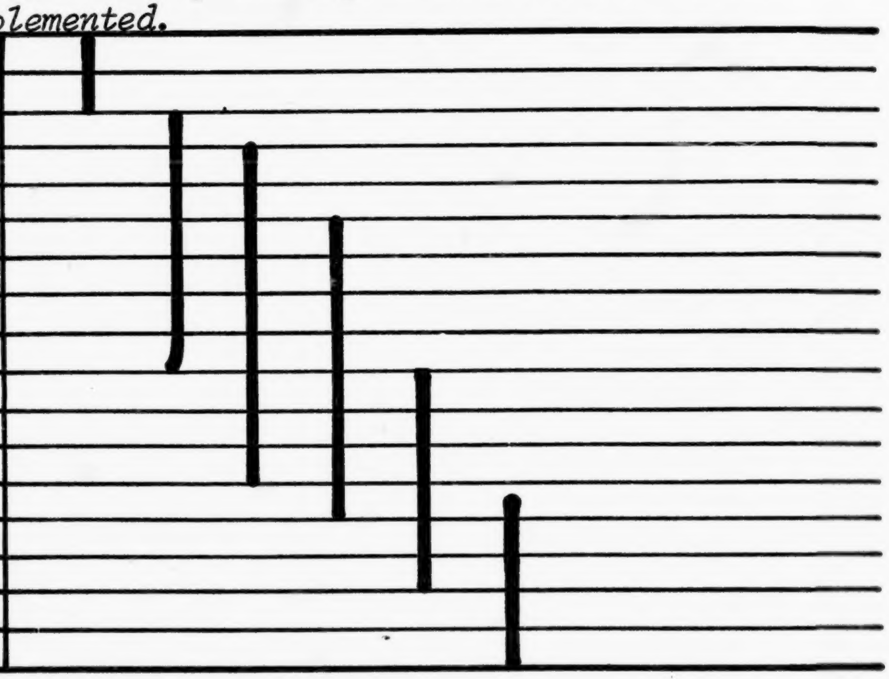
Statement 17. It is about time somebody did something to help the disadvantaged child.

Rank	Project	Mean
1	8	1.55
2	10	1.55
3	3d-Pre	1.63
4	13	1.64
5	7	1.67
6	3c-Pre	1.69
7	4	1.70
8	3a-E	1.79
9	3b	1.79
10	3c-Post	1.82
11	3e	1.86
12	15	1.87
13	3a-J	1.89
14	1	1.93
15	17	1.93
16	3d-Post	1.94
17	3a-S	2.12

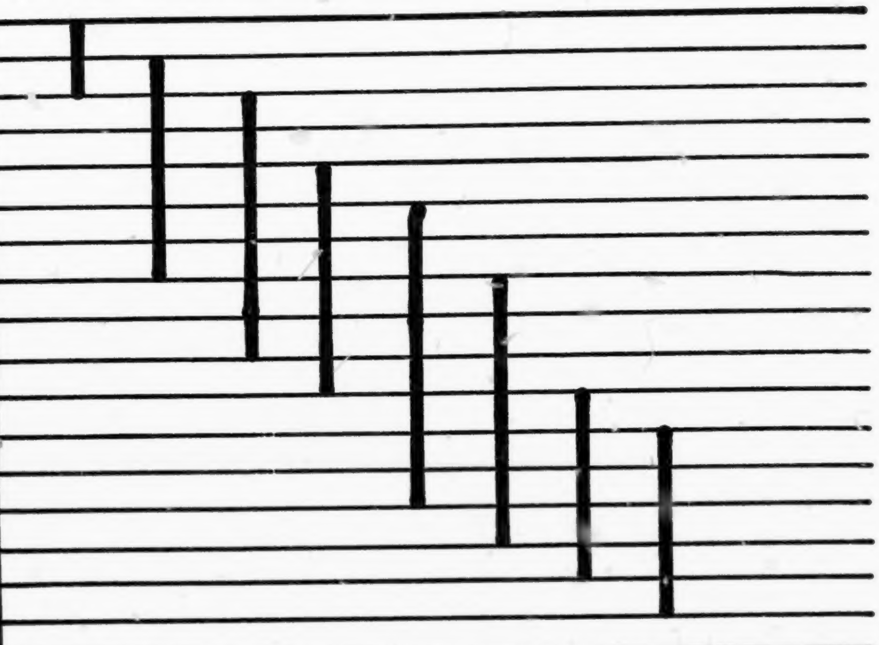
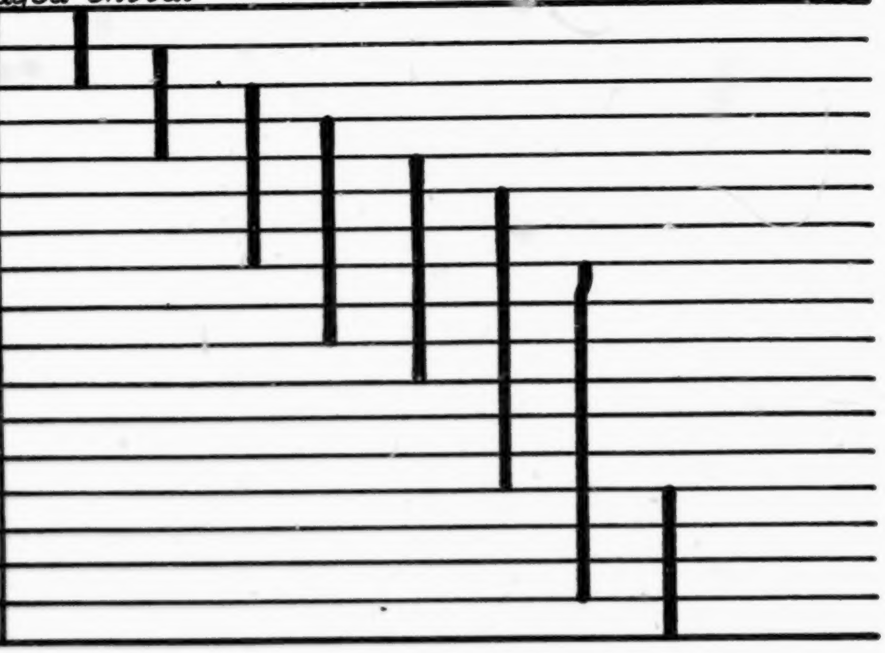


Statement 18. The people in charge of my project do not have a clear idea of the way in which their ideas are being implemented.

Rank	Project	Mean
1	10	1.91
2	13	2.07
3	3b	2.34
4	3c-Pre	2.39
5	3a-E	2.44
6	3d-Pre	2.49
7	1	2.51
8	7	2.53
9	8	2.53
10	3c-Post	2.60
11	3a-J	2.60
12	4	2.60
13	15	2.67
14	17	2.76
15	3a-S	2.77
16	3d-Post	2.79
17	3e	2.91



Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)						
Statement 19. Title I money could best be utilized as a means of enlarging already existing programs.									
1	8	2.26	│						
2	13	2.29	│	│					
3	1	2.35	│	│	│				
4	17	2.40	│	│	│	│			
5	10	2.45		│	│	│	│		
6	3e	2.50			│	│	│	│	
7	3c-Pre	2.54				│	│	│	│
8	3c-Post	2.55				│	│	│	│
9	3a-J	2.58				│	│	│	│
10	3b	2.59				│	│	│	│
11	3a-S	2.59				│	│	│	│
12	3d-Post	2.59				│	│	│	│
13	7	2.60					│	│	│
14	3a-E	2.60					│	│	│
15	3d-Pre	2.61					│	│	│
16	4	2.67						│	│
17	15	2.71							│
Statement 20. The Title I emphasis on the disadvantaged child is likely to be detrimental to the middle class child.									
1	1	1.74	│						
2	3c-Pre	1.81	│	│					
3	3c-Post	1.88	│	│					
4	10	1.91	│	│	│				
5	3d-Pre	1.91	│	│	│				
6	7	1.93	│	│	│	│			
7	13	1.93	│	│	│	│			
8	15	1.94		│	│	│			
9	8	1.95		│	│	│	│		
10	4	2.10			│	│	│	│	
11	17	2.10			│	│	│	│	
12	3d-Post	2.13				│	│	│	
13	3a-E	2.15					│	│	│
14	3a-J	2.20						│	│
15	3b	2.22						│	│
16	3e	2.24						│	│
17	3a-S	2.41							│

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)
	Statement 21. The results of my project will be relevant only to the disadvantaged child.		
1	8	3.80	
2	17	3.93	
3	3e	3.97	
4	3d-Post	3.97	
5	3d-Pre	3.97	
6	3c-Post	4.05	
7	3b	4.07	
8	3c-Pre	3.12	
9	3a-J	4.13	
10	15	4.13	
11	7	4.18	
12	3a-E	4.20	
13	13	4.21	
14	4	4.27	
15	1	4.32	
16	3a-S	4.37	
17	10	4.64	
	Statement 22. Without the full cooperation of the parents, the Title I projects are unlikely to help the disadvantaged child.		
1	3d-Pre	2.81	
2	4	3.00	
3	3d-Post	3.05	
4	13	3.18	
5	8	3.20	
6	3c-Pre	3.26	
7	17	3.26	
8	3c-Post	3.33	
9	1	3.38	
10	3a-J	3.45	
11	15	3.48	
12	7	3.49	
13	3e	3.51	
14	3a-E	3.54	
15	10	3.55	
16	3b	3.58	
17	3a-S	3.80	

Statement 23. The disadvantaged child deserves special attention and extra benefits.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					
1	3b	1.80	|					
2	3d-Pre	1.88	|	|				
3	7	1.99	|	|	|			
4	10	2.00		|	|	|		
5	13	2.04			|	|	|	
6	15	2.04			|	|	|	|
7	1	2.13				|	|	|
8	3c-Pre	2.13				|	|	|
9	3a-E	2.13				|	|	|
10	17	2.16				|	|	|
11	3a-J	2.17				|	|	|
12	3a-S	2.18				|	|	|
13	8	2.18				|	|	|
14	3c-Post	2.19				|	|	|
15	4	2.21					|	|
16	3d-Post	2.23						|
17	3e	2.25						|

Statement 24. My Title I project will be of more benefit to the middle class child than to the disadvantaged child.

1	10	2.00	|						
2	3c-Pre	2.05	|	|					
3	3c-Post	2.08	|	|					
4	13	2.11	|	|					
5	3d-Pre	2.17	|	|	|				
6	3b	2.19		|	|	|			
7	7	2.21		|	|	|			
8	8	2.23		|	|	|	|		
9	1	2.30			|	|	|	|	
10	3d-Post	2.33			|	|	|	|	|
11	3e	2.35			|	|	|	|	|
12	17	2.36				|	|	|	|
13	4	2.36				|	|	|	|
14	15	2.42					|	|	|
15	3a-E	2.44						|	|
16	3a-J	2.51							|
17	3a-S	3.16							

Statement 25. Title I money should be used to raise the salaries of teachers of the disadvantaged above the going rate in other schools.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					
1	7	3.02	│					
2	4	3.07	│	│				
3	3d-Pre	3.13	│	│	│			
4	3c-Post	3.15	│	│	│			
5	3c-Pre	3.16	│	│	│			
6	17	3.17	│	│	│			
7	8	3.18	│	│	│			
8	3e	2.25	│	│	│	│		
9	3a-E	3.27		│	│	│		
10	3a-J	3.29		│	│	│		
11	1	3.33			│	│		
12	3d-Post	3.35			│	│		
13	15	3.35			│	│		
14	3b	3.45				│	│	
15	3a-S	3.45				│	│	
16	10	3.64					│	│
17	13	3.75						│

Statement 26. The disadvantaged child deserves special attention and extra benefits.

1	10	1.45								
2	3b	1.71	│							
3	1	1.77	│	│						
4	7	1.86	│	│	│					
5	13	1.89	│	│	│	│				
6	15	1.89	│	│	│	│				
7	3a-S	1.91		│	│	│				
8	3a-E	1.91		│	│	│				
9	3d-Pre	1.95		│	│	│	│			
10	8	2.00			│	│	│	│		
11	3a-J	2.02			│	│	│	│	│	
12	17	2.07				│	│	│	│	│
13	3e	2.11					│	│	│	│
14	3c-Pre	2.12						│	│	│
15	3c-Post	2.21							│	│
16	4	2.22							│	│
17	3d-Post	2.25								│

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					
Statement 27. My project could be best utilized by incorporating it into an already existing program.								
1	13	2.36	│					
2	10	2.45	│	│				
3	4	2.46	│	│	│			
4	8	2.49	│	│	│	│		
5	3c-Post	2.60		│	│	│	│	
6	3c-Pre	2.63		│	│	│	│	
7	3e	2.65			│	│	│	
8	3a-J	2.67				│	│	
9	1	2.68				│	│	
10	15	2.68				│	│	
11	3b	2.70					│	
12	3a-S	2.70					│	
13	17	2. 70					│	
14	7	2.72					│	
15	3d-Post	2.76					│	
16	3a-E	2.97						│
17	3d-Pre	3.00						│
Statement 28. If the community group in the disadvantaged area would do more to upgrade themselves there would be no need for the Title I projects.								
1	1	2.22	│					
2	10	2.27	│	│				
3	3d-Pre	2.28	│	│	│			
4	4	2.28	│	│	│			
5	3d-Post	2.36	│	│	│	│		
6	3c-Pre	2.37	│	│	│	│		
7	7	2.37	│	│	│	│		
8	17	2.39	│	│	│	│	│	
9	3b	2.40	│	│	│	│	│	
10	15	2.41	│	│	│	│	│	
11	3a-E	2.48		│	│	│	│	
12	3c-Post	2.50			│	│	│	
13	8	2.51				│	│	
14	3e	2.53				│	│	
15	3a-S	2.55				│	│	
16	3a-J	2.61					│	
17	13	2.61					│	

Statement 29. The disadvantaged child for whose benefit Title I money is being used is uneducable.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					
1	10	1.09	│					
2	1	1.16	│					
3	13	1.36		│				
4	15	1.37		│				
5	3c-Pre	1.38		│	│			
6	17	1.42		│	│	│		
7	3b	1.42		│	│	│		
8	7	1.45		│	│	│	│	
9	3d-Pre	1.47		│	│	│	│	
10	3c-Post	1.50		│	│	│	│	
11	8	1.50		│	│	│	│	
12	3a-J	1.50		│	│	│	│	
13	3d-Post	1.52		│	│	│	│	
14	3a-E	1.54			│	│	│	
15	14	1.57				│	│	│
16	3e	1.59					│	│
17	3a-S	1.72						│

Statement 30. My project, to a large extent, is offsetting the effects of poor environment for the disadvantaged child.

1	10	1.09							
2	13	1.32	│						
3	1	1.36	│						
4	3c-Pre	1.60		│					
5	7	1.62		│					
6	15	1.63		│					
7	17	1.66		│	│				
8	3b	1.69		│	│				
9	3c-Post	1.71		│	│				
10	8	1.73		│	│				
11	3e	1.82		│	│				
12	3a-E	1.88			│	│			
13	3a-J	1.98				│			
14	3a-S	2.24					│		
15	4	2.41					│	│	
16	3d-Pre	2.59						│	│
17	3d-Post	2.65							│

Statement 31. The school can, to a large extent, offset the effects of poor environment.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)			
1	13	2.00				
2	4	2.19	│			
3	1	2.29	│	│		
4	3d-Pre	2.29	│	│		
5	7	2.30	│	│		
6	3c-Pre	2.31	│	│		
7	3e	2.42		│	│	
8	15	2.43		│	│	
9	8	2.45		│	│	
10	3c-Post	2.47		│	│	
11	17	2.47		│	│	
12	3a-E	2.48		│	│	
13	3d-Post	2.48		│	│	
14	10	2.55			│	
15	3b	2.56			│	│
16	3a-J	2.62			│	│
17	3a-S	2.78				│

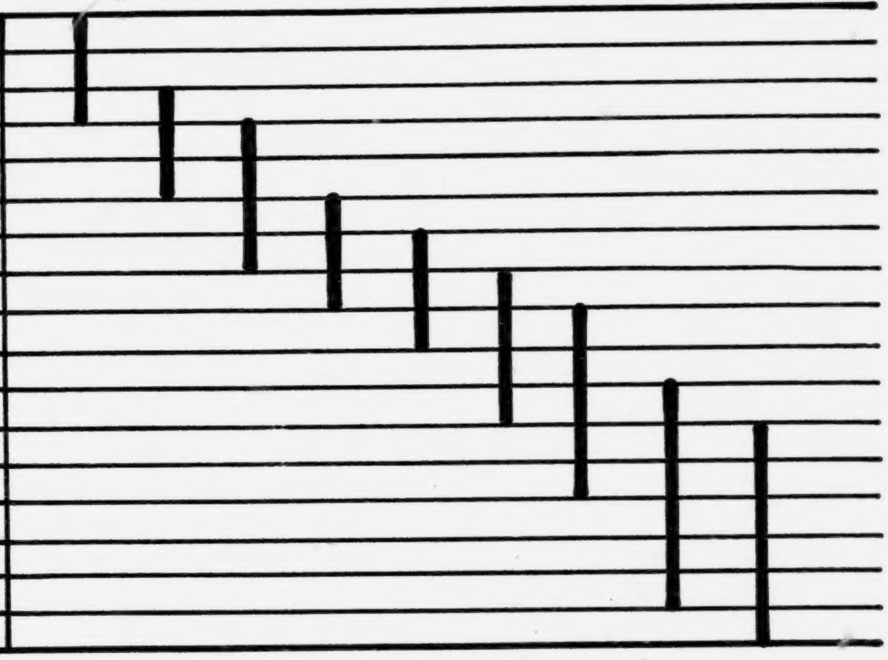
Statement 32. The children in my school need more discipline and less concern with academic programs.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					
1	10	1.73	│					
2	7	1.87	│	│				
3	15	1.99		│	│			
4	3d-Pre	2.04		│	│	│		
5	3b	2.06			│	│		
6	3a-S	2.10			│	│		
7	13	2.11			│	│		
8	1	2.12			│	│		
9	4	2.15			│	│		
10	3c-Pre	2.15			│	│		
11	3a-E	2.18			│	│	│	
12	17	2.19			│	│	│	
13	3d-Post	2.19			│	│	│	
14	3c-Post	2.21				│	│	
15	8	2.23				│	│	│
16	3e	2.38					│	│
17	3a-J	2.44						│

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)

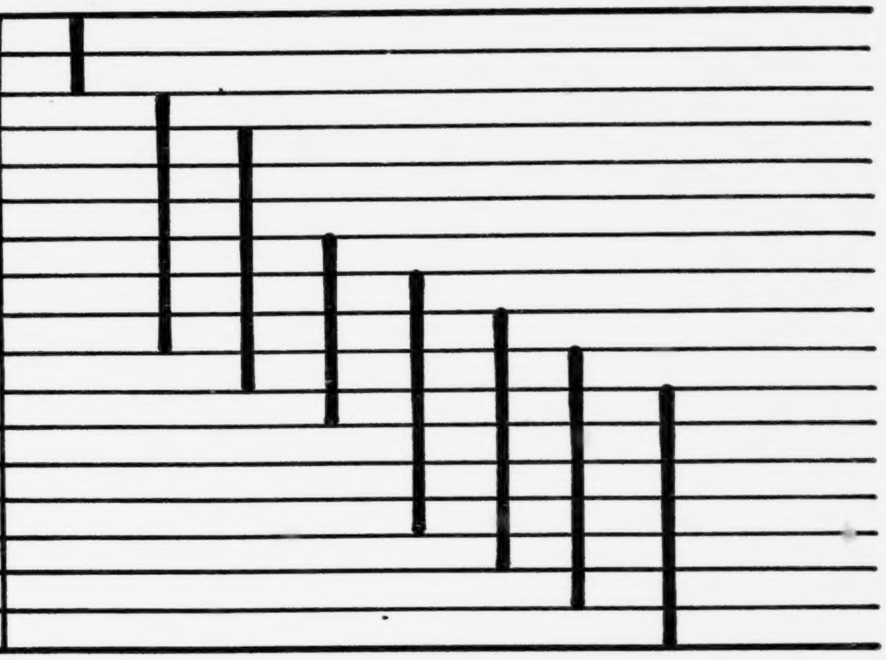
Statement 33. My project is failing in reaching the goals outlined for it.

1	10	1.73	
2	4	1.80	
3	13	1.86	
4	3a-S	1.99	
5	15	2.00	
6	7	2.07	
7	3a-E	2.09	
8	8	2.18	
9	3a-J	2.26	
10	3b	2.28	
11	3c-Pre	2.35	
12	1	2.40	
13	3d-Pre	2.42	
14	3d-Post	2.48	
15	3c-Post	2.49	
16	17	2.52	
17	3e	2.54	



Statement 34. The schools cannot provide a solution to all of society's ills.

1	3d-Pre	3.91	
2	10	3.98	
3	3c-Post	4.14	
4	1	4.16	
5	3d-Post	4.16	
6	4	4.19	
7	3c-Pre	4.23	
8	17	4.28	
9	3e	4.30	
10	3b	4.34	
11	3a-E	4.39	
12	3a-J	4.41	
13	8	4.45	
14	7	4.46	
15	3a-S	4.48	
16	15	4.50	
17	13	4.54	



Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					

Statement 35. The chief advantage of my project is its concern with academic programs.

Rank	Project	Mean						
1	3a-S	2.13						
2	3a-E	2.57	│					
3	15	2.71	│	│				
4	7	2/73	│	│	│			
5	3a-J	2.86		│	│			
6	ed-Pre	2.92			│			
7	17	3.22				│		
8	3e	3.25				│		
9	3d-Post	3.29				│		
10	3c-Pre	3.33				│		
11	8	3.36				│		
12	1	3.40				│	│	
13	3c-Post	3.42				│	│	
14	13	3.43				│	│	
15	3b	3.59					│	
16	10	3.91						│
17	4	3.93						│

Statement 36. Most teachers who are participating in Title I projects are primarily interested in the extra compensation.

Rank	Project	Mean								
1	7	2.13	│							
2	10	2.18	│	│						
3	3a-E	2.19	│	│						
4	4	2.24	│	│	│					
5	3b	2.27	│	│	│					
6	15	2.31	│	│	│					
7	1	2.35	│	│	│	│				
8	3d-Pre	2.38		│	│	│				
9	8	2.3[illegible]		│	│	│	│			
10	3a-J	2.40		│	│	│	│	│		
11	13	2.43			│	│	│	│	│	
12	3d-Post	2.56				│	│	│	│	│
13	3c-Pre	2.62					│	│	│	│
14	17	2.63						│	│	│
15	3e	2.66							│	│
16	3a-S	2.67								│
17	3c-Post	2.73								│

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)			
Statement 37. The Federal Government should not suggest programs for the disadvantaged, but simply provide the money and let local authorities decide in what way it is to be spent.						
1	1	1.94				
2	3a-E	2.17	█			
3	4	2.17	█			
4	3c-Pre	2.23	█	█		
5	3a-J	2.26	█	█	█	
6	8	2.32	█	█	█	█
7	17	2.31	█	█	█	█
8	7	2.32	█	█	█	█
9	3c-Post	2.35	█	█	█	█
10	13	2.36	█	█	█	█
11	3b	2.41		█	█	█
12	3a-S	2.41		█	█	█
13	3d-Pre	2.41		█	█	█
14	10	2.45		█	█	█
15	3d-Post	2.47			█	█
16	15	2.48			█	█
17	3e	2.52				█
Statement 38. Before the Title I programs were written, the school administration should have conferred more with the teachers in disadvantaged areas.						
1	10	3.36				
2	3d-Pre	3.75	█			
3	3d-Post	3.76	█	█		
4	3c-Post	3.78	█	█		
5	4	3.90	█	█	█	
6	3c-Pre	3.91	█	█	█	
7	3a-S	3.91	█	█	█	
8	3b	3.95	█	█	█	
9	3a-E	3.96		█	█	
10	7	3.99			█	█
11	8	4.00			█	█
12	15	4.03			█	█
13	3a-J	4.04			█	█
14	17	4.05			█	█
15	3e	4.08			█	█
16	13	4.11			█	█
17	1	4.24				█

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)							

Statement 39. Programs to help the disadvantaged child should be the exclusive responsibility of local school authorities.

Rank	Project	Mean								
1	10	1.91	█							
2	1	1.93	█	█						
3	13	2.07	█	█	█					
4	3a-S	2.08	█	█	█					
5	3c-Pre	2.11		█	█	█				
6	3a-E	2.12		█	█	█				
7	7	2.16			█	█	█			
8	3e	2.25			█	█	█	█		
9	8	2.25			█	█	█	█		
10	17	2.26			█	█	█	█		
11	3a-J	2.27			█	█	█	█		
12	3d-Pre	2.30				█	█	█	█	
13	3d-Post	2.30				█	█	█	█	
14	3b	2.34					█	█	█	█
15	15	2.38						█	█	█
16	4	2.50							█	█
17	3c-Post	2.55								█

Statement 40. The Title I projects are basically a waste of time.

Rank	Project	Mean						
1	10	1.27						
2	4	1.46	█					
3	1	1.47	█					
4	15	1.56	█	█				
5	3b	1.56	█	█				
6	7	1.57	█	█	█			
7	13	1.64	█	█	█	█		
8	3d-Pre	1.64	█	█	█	█		
9	3a-E	1.65	█	█	█	█	█	
10	3c-Pre	1.69		█	█	█	█	█
11	8	1.70		█	█	█	█	█
12	3a-E	1.76		█	█	█	█	█
13	3a-J	1.77			█	█	█	█
14	3d-Post	1.80				█	█	█
15	17	1.84				█	█	█
16	3c-Post	1.86					█	█
17	3e	1.87						█

Statement 41. As a result of the School-Community Coordinator's work, community understanding of the school has improved.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)						
1	3b	2.14	│						
2	7	2.19	│	│					
3	3d-Pre	2.21	│	│	│				
4	3a-E	2.34		│	│	│			
5	1	2.34		│	│	│			
6	3c-Post	2.37			│	│	│		
7	3c-Pre	2.40				│	│	│	
8	10	2.40				│	│	│	
9	13	2.42				│	│	│	
10	8	2.50				│	│	│	│
11	17	2.51				│	│	│	│
12	15	2.52					│	│	│
13	4	2.53						│	│
14	3d-Post	2.53						│	│
15	3a-J	2.53						│	│
16	3e	2.64							│
17	3a-S	2.64							│

Statement 42. As a result of the School-Community Coordinator's work, parents are more responsive to teachers' inquiries and requests.

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)							
1	3 b	2.24	│							
2	7	2.30	│	│						
3	3d-Pre	2.31	│	│	│					
4	13	2.38	│	│	│	│				
5	3c-Post	2.44		│	│	│	│			
6	3a-E	2.46			│	│	│	│		
7	1	2.51				│	│	│	│	
8	3c-Pre	2.55				│	│	│	│	│
9	15	2.56					│	│	│	│
10	4	2.56					│	│	│	│
11	3d-Post	2.61						│	│	│
12	3a-J	2.61						│	│	│
13	17	2.62						│	│	│
14	3e	2.65							│	│
15	8	2.66							│	│
16	10	2.67							│	│
17	3a-S	2.73								│

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)						

Statement 43. Community opinion of the school has improved due to the School-Community Coordinator's work.

Rank	Project	Mean							
1	3b	2.30	│						
2	3d-Pre	2.33	│	│					
3	7	2.39	│	│	│				
4	13	2.45		│	│	│			
5	3c-Post	2.49			│	│	│		
6	3a-E	2.52			│	│	│		
7	1	2.53			│	│	│		
8	4	2.57				│	│	│	
9	3c-Pre	2.58				│	│	│	
10	15	2.59				│	│	│	
11	3a-J	2.60				│	│	│	
12	17	2.61				│	│	│	
13	3d-Post	2.64					│	│	│
14	8	2.70						│	│
15	3e	2.73						│	│
16	10	2.78							│
17	3a-S	2.80							│

Statement 44. Student attitudes toward school have improved due to the School-Community Coordinator's work.

Rank	Project	Mean							
1	3d-Pre	2.48	│						
2	3b	2.49	│						
3	7	2.61	│	│					
4	3a-E	2.65		│	│				
5	3c-Post	2.68		│	│	│			
6	13	2.71		│	│	│			
7	3c-Pre	2.73		│	│	│	│		
8	4	2.73		│	│	│	│		
9	1	2.74		│	│	│	│		
10	15	2.74		│	│	│	│		
11	3d-Post	2.74		│	│	│	│		
12	17	2.78			│	│	│		
13	3a-J	2.82				│	│	│	
14	3e	2.85				│	│	│	│
15	10	2.89					│	│	│
16	3a-S	2.97						│	│
17	8	3.02							│

<table>
<tr><th>Rank</th><th>Project</th><th>Mean</th><th colspan="5">Non-Significant Difference Ranges
(95-Percent Confidence Interval)</th></tr>
<tr><td colspan="8"><i>Statement 45. As a result of the School-Community Coordinator's work, the school's understanding of the community has improved.</i></td></tr>
<tr><td>1</td><td>3d-Pre</td><td>2.31</td><td>│</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2</td><td>3b</td><td>2.32</td><td>│</td><td>│</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td>7</td><td>2.39</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>4</td><td>3c-Post</td><td>2.45</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>5</td><td>3c-Pre</td><td>2.46</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>6</td><td>3a-E</td><td>2.49</td><td></td><td>│</td><td>│</td><td></td><td></td></tr>
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<tr><td>8</td><td>4</td><td>2.54</td><td></td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>9</td><td>3a-J</td><td>2.58</td><td></td><td></td><td>│</td><td>│</td><td></td></tr>
<tr><td>10</td><td>15</td><td>2.58</td><td></td><td></td><td>│</td><td>│</td><td></td></tr>
<tr><td>11</td><td>8</td><td>2.59</td><td></td><td></td><td>│</td><td>│</td><td></td></tr>
<tr><td>12</td><td>3d-Post</td><td>2.60</td><td></td><td></td><td>│</td><td>│</td><td></td></tr>
<tr><td>13</td><td>1</td><td>2.61</td><td></td><td></td><td>│</td><td>│</td><td>│</td></tr>
<tr><td>14</td><td>17</td><td>2.61</td><td></td><td></td><td>│</td><td>│</td><td>│</td></tr>
<tr><td>15</td><td>3e</td><td>2.72</td><td></td><td></td><td></td><td>│</td><td>│</td></tr>
<tr><td>16</td><td>3a-S</td><td>2.72</td><td></td><td></td><td></td><td>│</td><td>│</td></tr>
<tr><td>17</td><td>10</td><td>2.78</td><td></td><td></td><td></td><td></td><td>│</td></tr>
<tr><td colspan="8"><i>Statement 46. As a result of the School-Community Coordinator's work, parents have provided better home environment for their school-aged children, particularly, better environments for school work.</i></td></tr>
<tr><td>1</td><td>3b</td><td>2.75</td><td>│</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2</td><td>3d-Pre</td><td>2.77</td><td>│</td><td>│</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td>1</td><td>2.84</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>4</td><td>3c-Post</td><td>2.84</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>5</td><td>7</td><td>2.87</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>6</td><td>15</td><td>2.88</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>7</td><td>4</td><td>2.89</td><td>│</td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>8</td><td>17</td><td>2.94</td><td></td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>9</td><td>3a-E</td><td>2.95</td><td></td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>10</td><td>3d-Post</td><td>2.95</td><td></td><td>│</td><td>│</td><td></td><td></td></tr>
<tr><td>11</td><td>3c-Pre</td><td>2.96</td><td></td><td></td><td>│</td><td>│</td><td></td></tr>
<tr><td>12</td><td>3e</td><td>2.96</td><td></td><td></td><td>│</td><td>│</td><td></td></tr>
<tr><td>13</td><td>13</td><td>3.00</td><td></td><td></td><td>│</td><td>│</td><td>│</td></tr>
<tr><td>14</td><td>8</td><td>3.02</td><td></td><td></td><td>│</td><td>│</td><td>│</td></tr>
<tr><td>15</td><td>3a-J</td><td>3.14</td><td></td><td></td><td></td><td>│</td><td>│</td></tr>
<tr><td>16</td><td>10</td><td>3.22</td><td></td><td></td><td></td><td></td><td>│</td></tr>
<tr><td>17</td><td>3a-S</td><td>3.23</td><td></td><td></td><td></td><td></td><td>│</td></tr>
</table>

Rank	Project	Mean	Non-Significant Difference Ranges (95-Percent Confidence Interval)					
Statement 47. As a result of the School-Community Coordinator's work, pupils and parents have been more cooperative with the school.								
1	3b	2.37	┃					
2	3d-Pre	2.38	┃					
3	7	2.42	┃	┃				
4	4	2.57		┃	┃			
5	3c-Post	2.58			┃			
6	15	2.59			┃			
7	13	2.61			┃	┃		
8	3c-Pre	2.66			┃	┃	┃	
9	3a-E	2.66			┃	┃	┃	
10	1	2.66			┃	┃	┃	
11	17	2.68			┃	┃	┃	
12	3d-Post	2.73			┃	┃	┃	
13	8	2.75			┃	┃	┃	
14	10	2.78				┃	┃	┃
15	3a-J	2.78				┃	┃	┃
16	3e	2.81					┃	┃
17	3a-S	2.94						┃

SELECTED AND ANNOTATED
BIBLIOGRAPHY OF STATISTICAL SOURCES

A variety of statistical tests of significance have been used in these evaluations. It is beyond the scope of this report to discuss them individually. Following is an annotated list of primary references.

Guilford, J.P., *Fundamental Statistics in Psychology and Education*, New York: McGraw-Hill Book Company, Inc., 1956.

A high-powered book, mathematically. Emphasizes descriptive statistics and includes some methods of statistical inference. Parametric statistics assume that the distribution of the body of data out of which a sample has been taken is of a known form. Given the assumptions about the form of the sample (its distribution), statistical tests and analyses can be made.

Horst, Paul, *Factor Analysis of Data Matrices*, New York: Holt, Rinehart, and Winston, Inc., 1965.

This book attempts to show the general applicability of factor analysis throughout science. Factor analysis is a method used to determine which of a number of quanitative measures are enough alike to be grouped together under a common rubric. Background material is presented in the first four chapters but, starting with the second chapter, matrix algebra is featured. The book quickly becomes highly abstract and mathematically sophisticated. It includes proofs as well as examples. The book also includes a lengthy appendix in which the various factor methods and instructions are reduced to FORTRAN computer language.

Osgood, C.E., Suci, G.J., and Tannenbaum, P.H., *The Measurement of Meaning*, Urbana, Illinois: University of Illinois Press, 1957.

This book deals mainly with semantic differentiation, a method of quantifying connotative meanings of concepts along several dimensions (usually evaluative, potency, and activity) which are determined by factor-analytic techniques.

Siegal, Sidney, *Nonparametric Statistics for the Behavioral Sciences*, New York: McGraw-Hill Book Company, Inc., 1956.

This book describes nonparametric statistical tests and measures of correlation for related and independent samples. These tests do not make assumptions about distribution and are only for computation. They are presented clearly and are illustrated by good examples.

Torgerson, Warren S., *Theory and Methods of Scaling*, New York: John Wiley and Sons, Inc., 1958.

This book deals with general-purpose psychological scaling methods which lead to stimulus ordering along one or more dimensions of interest. If successfully applied, this ordering results in scales which at least partly mirror the operation of empirical laws. The book presupposes an elementary knowledge of calculus, statistics, and matrix algebra. The book is well organized but highly technical.